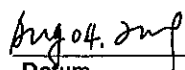
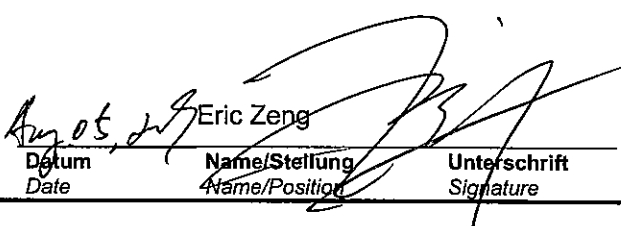


Prüfbericht - Nr.: 16018730 001		Seite 1 von 58	
Test Report No.:		Page 1 of 58	
Auftraggeber:	Seikaku Technical Group Limited.		
Client:	Offshore Chambers, P.O. Box. 217 Apia, Samoa		
Gegenstand der Prüfung:	Wireless Microphone System		
Test item:			
Bezeichnung:	See page 3	Serien-Nr.:	Engineering samples
Identification:		Serial No.:	without serial number
Wareneingangs-Nr.:	173028720	Eingangsdatum:	July 29, 2009
Receipt No.:		Date of receipt:	
Prüfört:	Dongguan Jingheng Electron Co., Ltd.		
Testing location:	Shenshan Industrial City, Hengli Town, Dongguan, Guangdong 523465, P.R. China		
Prüfgrundlage:	IEC 60065: 2001+A1:2005		
Test specification:			
Prüfergebnis:	Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n).		
Test Result:	The test item passed the test specification(s).		
Prüflaboratorium:	TUV Rheinland (Guangdong) Ltd.		
Testing Laboratory:	Unit C-101, No. 11 Caipin Road, GZ Science City, Guangzhou 510663, P.R. China		
geprüft/ tested by:	kontrolliert/ reviewed by:		
 Datum Name/Stellung Unterschrift Date Name/Position Signature		 Datum Name/Stellung Unterschrift Date Name/Position Signature	
Datum Name/Stellung Unterschrift Date Name/Position Signature		Datum Name/Stellung Unterschrift Date Name/Position Signature	
Sonstiges/ Other Aspects:			
- Per application letter dated July 29, 2009, project order: 173028720			
Abkürzungen:	P(ass) = entspricht Prüfgrundlage	Abbreviations:	P(ass) = passed
	F(ail) = entspricht nicht Prüfgrundlage		F(ail) = failed
	N/A = nicht anwendbar		N/A = not applicable
	NT = nicht getestet		NT = not tested
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.</i>			

TEST REPORT IEC/EN 60065 Audio, Video and Similar Electronic Apparatus: Safety Requirements	
Report Reference No.:	See cover page
Tested by (name + signature)	See cover page
Witnessed by (name + signature):	--
Supervised by (name + signature) ...:	--
Approved by (name + signature)	See cover page
Date of issue	See cover page
CB Testing Laboratory:	TUV Rheinland (Guangdong) Ltd.
Address	Unit C-101, No. 11 Caipin Road, GZ Science City, Guangzhou 510663, P.R. China
Testing location/ procedure	Dongguan Jingheng Electron Co., Ltd.
Testing location/ address	Shenshan Industrial City, Hengli Town, Dongguan, Guangdong 523465, P.R. China
Applicant's name:	Seikaku Technical Group Limited.
Address	Offshore Chambers, P.O. Box. 217 Apia, Samoa
Test specification:	
Standard	IEC 60065: 2001+A1: 2005
Test procedure	N/A
Non-standard test method.....:	N/A
Test Report Form No:	IECEN 60065G
Test Report Form(s) Originator	ASTABEAB
Master TRF	2006-03
Copyright © 2006 IEC System for Conformity Testing and Certification of Electrical Equipment (IECEE), Geneva, Switzerland. All rights reserved.	
This publication may be reproduced in whole or in part for non-commercial purposes as long as the IECEE is acknowledged as copyright owner and source of the material. IECEE takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context.	
If this Test Report Form is used by non-IECEE members, the IECEE/IEC logo shall be removed	

Test item description	Wireless Microphone System
Trade Mark	(1) SHOW (2) TOPP PRO
Manufacturer	Same as applicant
Model/Type reference	(1)UP-8P, UP-88P, UP-8G, UP-88G, UP-83H, UP-883H, UP-81H, UP-881H, UP-86H, UP-886H, UP-87CH, UP-887CH, UP-88CH, UP-888CH, UP-8DR, UP-81DR, UP-82DR, UR-81DR, UR-82DR, UB-82R, UP-81DRV,UR-81DRV, UPX-81DR, UP-82DRV, UPX-82DR, UR-82DRV (2) TMW-9144R, TMW-9144P, TMW-9144T, TMW-9162 PLL UHF DIVERESITY RECEIVER
Ratings	See page 6

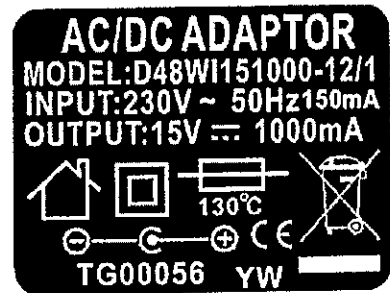
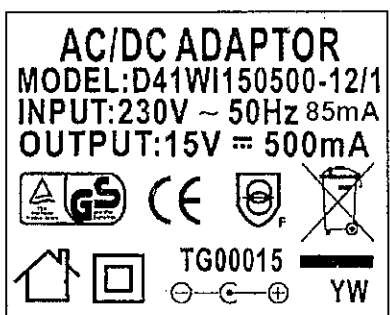
Copy of marking plate

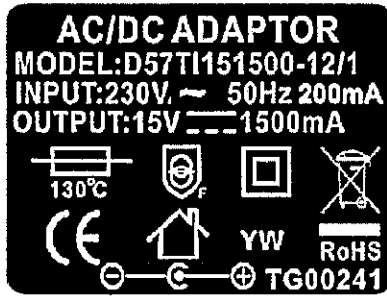
Below information was silk-screen on external enclosure of receiver.



Note:
This is a representative label; other models of receiver are identical to this one except for the model name and rated current.

Below information was printed and pasted on enclosure of external adaptor.





Below information was silk-screen or pasted on external enclosure of transmitter.



Note:

This is a representative label; other models of transmitter are identical to this one except for the model name.

Summary of testing:

1. The samples tested comply with the requirements of this standard.
2. The test items are pre-production samples without serial numbers.
3. Unless otherwise specified, UPX-81DR, UPX-82DR and UB-82R were selected for testing.

Test item particulars	
Classification of installation and use	Portable
Supply connection	See Rating of product in this page
.....	
Possible test case verdicts:	
- test case does not apply to the test object	N/A
- test object does meet the requirement	Pass (P)
- test object does not meet the requirement	Fail (F)
Testing:	
Date of receipt of test items	July 20, 2009
Date(s) of performance of tests	July 20, 2009 – July 29, 2009
General remarks:	
The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory. "(see Enclosure #)" refers to additional information appended to the report. "(see appended table)" refers to a table appended to the report. Throughout this report, a comma is used as the decimal separator.	
<u>Factory:</u>	
Dongguan Jingheng Electron Co., Ltd. Shenshan Industrial City, Hengli Town, Dongguan, Guangdong 523465, P.R. China	
General product information:	
1. UP-8DR, UP-81DR, UP-82DR, UR-81DR, UR-82DR, UP-81DRV, UR-81DRV, UPX-81DR, UP-82DRV, UPX-82DR and UR-82DRV are same products except for channel number, front panel design, DSP function and power consumption.	
2. The 12 models of receiver: UP-8DR, UP-81DR, UP-82DR, UR-81DR, UR-82DR, UB-82R, UP-81DRV, UR-81DRV, UPX-81DR, UP-82DRV, UPX-82DR and UR-82DRV. They are supplied by adapter with DC15V output. Refer to page 6 for detail.	
3. The 4 models of body-pack transmitter: UP-8P, UP-88P, UP-8G and UP-88G, They are identical to the approved models UL-8P, UL-88P, UL-8G and UL-88G except for model name and appearance color.	
4. The 10 models of handheld microphone: UP-83H, UP-883H, UP-81H, UP-881H, UP-86H, UP-886H, UP-87CH, UP-887CH, UP-88CH and UP-888CH. They are identical to the approved models UL-83H, UL-883H, UL-81H, UL-881H, UL-86H, UL-886H, UL-87CH, UL-887CH, UL88CH and UL-888CH except for model name and appearance color.	
5. Model TMW-9144R is same as model UP-8DR except for model name and trademark; Model TMW-9144P is same as model UP-8P except for model name and trademark; Model TMW-9144T is same as model UP-83H except for model name and trademark; Model TMW-9162 PLL UHF DIVERESITY RECEIVER is same as model UB-82R except for model name and trademark.	

Rating of product:

UP-8DR, UP-81DR, UR-81DR, UB-82R, TMW-9144R, TMW-9162 PLL UHF DIVERESITY RECEIVER:
AC230V, 50Hz, 85mA, supplied by external adapter (model: D41WI150500-12/1, direct plug in equipment)

UP-81DRV, UR-81DRV, UPX-81DR, UP-82DR, UR-82DR: AC230V, 50Hz, 150mA, supplied by external
adapter (model: D48WI151000-12/1, direct plug in equipment)

UP-82DRV, UPX-82DR, UR-82DRV,: AC230V, 50Hz, 200mA, supplied by external adapter (model:
D57TI151500-12/1, fixed power cord equipment),

UP-8P, UP-88P, UP-8G, UP-88G, UP-83H, UP-883H, UP-81H, UP-881H, UP-86H, UP-886H, UP-87CH,
UP-887CH, UP-88CH, UP-888CH, TMW-9144P, TMW-9144T, : DC3V, 0,3A, supply by two batteries.

IEC/EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
3	GENERAL REQUIREMENTS		P
	Safety class of the apparatus	Class II	P
4	GENERAL CONDITIONS OF TESTS		P
4.1.4	Ventilation instructions require the use of the test box	Yes	P
5	MARKING		P
	Comprehensible and easily discernible	All marking are printed on outer enclosure of the appliance.	P
	Permanent durability against water and petroleum spirit	After rubbing test by water and petroleum spirit, the markings are still easily discernible, indelible and legible.	P
5.1	Identification, maker, model	Trademark 'SHOW' and model no. are marked on the outer enclosure.	P
	Class II symbol if applicable	Double square symbol provided.	P
	Rated supply voltage and symbol	See marking label in page 3, 4	P
	Frequency if safety dependant	See marking label in page 3, 4	P
	Rated current or power consumption	See marking label in page 3, 4	P
5.2	Earth terminal	Class II apparatus.	N/A
	Hazardous live terminals	No such terminals.	N/A
	Supply output terminals (other than mains)	The nominal output voltage and current of adaptor are marked on the name label.	P
5.3	Use of triangle with exclamation mark	No replaced specified component	N/A
5.4	Instructions for use	English. Instruction in other language will be provided when national approvals.	P
5.4.1	Mains powered equipment not exposed to dripping or splashing. Warning concerning objects filled with liquid, etc.	See user manual.	P

IEC/EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
	Hazardous live terminals, instructions for wiring		N/A
	Instructions for replacing lithium battery	No replacing lithium battery provided.	N/A
	Instructions for modem if fitted	No modem provided.	N/A
	Class I earth connection warning	Class II apparatus.	N/A
	Instructions for multimedia system connection	Not multimedia system.	N/A
	Special stability warning for fixed installation		N/A
	Warning: battery exposure to heat	No replacing lithium batteries provided.	N/A
	Warning: protective film on CRT face	No CRT provided.	N/A
5.4.2	Disconnect device: plug/coupler or all-pole mains switch location, accessibility and markings	Mains plug of adapter was used as disconnect device. See user manual.	P
	Instructions for permanently connected equipment	Not permanently connected equipment.	N/A

6	HAZARDOUS RADIATION		N/A
6.1	Ionizing radiation < 36 pA/kg (0,5 mR/h)	No ionizing radiation inside the EUT.	N/A
6.1 EN 60065	European Council Directive 96/29/Euratom of 13 May 1996 10cm from outer surface of apparatus <1µSv/h (0,1mR/h)	See above.	N/A
6.2	Laser radiation, emission limits to IEC 60825-1	No laser radiation inside the EUT.	N/A
	Emission limits under fault conditions		N/A

7	HEATING UNDER NORMAL OPERATING CONDITIONS		P
7.1	Temperature rises not exceeding specified values, no operation of fuse links	(see appended table)	P
7.1.1	Temperature rise of accessible parts	(see appended table)	P
7.1.2	Temperature rise of parts providing electrical insulation	(see appended table)	P
7.1.3	Temperature rise of parts acting as a support or as a mechanical barrier	(see appended table)	P
7.1.4	Temperature rise of windings	(see appended table)	P

IEC/EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
7.1.5	Parts not subject to a limit under 7.1.1 to 7.1.4	(see appended table)	P
7.2	Softening temperature of insulating material supporting parts conductively connected to the mains carrying a current > 0,2 A at least 150 °C		N/A
8	CONSTRUCTIONAL REQUIREMENTS WITH REGARD TO THE PROTECTION AGAINST ELECTRIC SHOCK		P
8.1	Conductive parts covered by lacquer, paper, untreated textile oxide films and beads etc. considered to be bare	Enamel coating of winding and the surface material electrolytic capacitors are not considered as safety isolation.	P
8.2	No shock hazard when changing voltage setting device, fuse-links or handling drawers etc.	Tools are used.	P
8.3	Insulation of hazardous live parts not provided by hygroscopic material	No hygroscopic material.	P
8.4	No risk of electric shock following the removal of a cover which can be removed by hand	No such cover which can be removed by hand.	N/A
8.5	Class I equipment	Class II equipment.	N/A
	Basic insulation between hazardous live parts and earthed accessible parts		N/A
	Resistors bridging basic insulation complying with 14.1 a)	No such components provided.	N/A
8.6	Class II equipment and Class II constructions within Class I equipment	See below.	P
	Reinforced or double insulation between hazardous live parts and accessible parts	Secondary circuit to primary circuit is separated by reinforced or double insulation. (The insulation system of adapter is double insulation system).	P
	Components bridging reinforced or double insulation complying with 14.1 a) or 14.3	The external adapters were tested during this approval.	P
	Basic and supplementary insulation each being bridged by a capacitor complying with 14.1 a)	No such components provided.	N/A
	Reinforced or double insulation being bridged with 2 capacitors in series complying with 14.2.1 a)	No such components provided.	N/A
	Reinforced or double insulation being bridged with a single capacitor complying with 14.2.1 b)	No such components provided.	N/A

IEC/EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
	Basic insulation bridged by components complying with 14.3.4.3	No such components provided.	N/A
8.7	This clause is void		--
8.8	Basic or supplementary insulation > 0,4 mm (mm) :	The thickness of bobbin between primary or secondary winding and core in adapter: 0,7 mm	P
	Reinforced insulation > 0,4 mm (mm)	The thickness of enclosure of adapter: 2,6 mm. The thickness of bobbin between primary winding and secondary winding in adapter: 0,7 mm	P
	Thin sheet insulation (excluding non-separable thin sheet insulation. See 8.22)	See blow.	P
	Basic or supplementary insulation, at least two layers, each meeting 10.3	Two layers insulation tapes covered the bottom side of secondary drawer separate the secondary winding and the core of transformer in adapter. Each layer meets electric strength of 10.3.	P
	Basic or supplementary insulation, three layers any two of which meet 10.3		N/A
	Reinforced insulation, two layers each of which meet 10.3		N/A
	Reinforced insulation, three layers any two which meet 10.3		N/A
8.9	Adequate insulation between internal hazardous live conductors and accessible parts	Primary lead wire is UL-approved double insulation wire with thickness more than 0,4mm.	P
	Adequate insulation between internal hazardous live parts and conductors connected to accessible parts	See above.	P
8.10	Double insulation between conductors connected to the mains and accessible parts. Double insulation between internal hazardous live parts and conductors connected to accessible parts.	See above.	P

IEC/EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
8.11	Detaching of wires	See below.	P
	No undue reduction of creepages or clearance distances if wires become detached	Wires adequately protected against detachment by using two independent mechanical fixings.	P
	Vibration test carried out	Vibration test is carried out according to clause 12.1.2.	P
8.12	This clause is void		--
8.13	Adequate fastening of windows, lenses, lamp covers etc. (pull test 20 N for 10 s)	No such parts that hazardous live parts are rendered accessible by their absence are used.	N/A
8.14	Adequate fastening of covers (pull test 50 N for 10 s)	Enclosure of appliance is tested with 50N for 10s, no access to hazardous live parts.	P
8.15	No risk of damage to the insulation of internal wiring due to hot parts or sharp edges	Wires inside the appliance are well secured, no risk of damage to the internal wiring.	P
8.16	Only special supply equipment can be used		N/A
8.17	Insulated winding wire without additional interleaved insulation	No triple insulated winding wire provided.	N/A
8.18	Endurance test as required by 8.17		N/A
8.19	Disconnection from the mains		P
8.19.1	Disconnect device	Mains plug is used as disconnect device. See clause 5.4.2.	P
	All-pole switch or circuit breaker with >3mm contact separation	See above.	N/A
8.19.2	Mains switch ON indication		N/A
8.20	Switch not fitted in the mains cord		N/A
8.21	Bridging components comply with clause 14	No such components.	N/A
8.22	Non-separable thin sheet material		N/A

IEC/EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
9	ELECTRIC SHOCK HAZARD UNDER NORMAL OPERATING CONDITIONS		P
9.1	Testing on the outside		P
9.1.1	For voltages >1000 V ac or >1500 V dc complies with clause 13.3.1 for basic insulation	No such high voltage.	N/A
9.1.1.1	a) Open circuit voltages	Max. output voltage of external adapter: 23,9VDC	P
	b) Touch current measured from terminal devices using the network in annex D	No bridging capacitor between primary circuit and secondary circuit.	N/A
	c) Discharge not exceeding 45 µC		N/A
	d) Energy of discharge not exceeding 350 mJ		N/A
9.1.1.2	Test with test finger and test probe	No access to hazardous live parts.	P
9.1.2	No hazardous live shafts of knobs, handles or levers		P
9.1.3	Ventilation holes and other holes tested by means of 4 mm x 100 mm test pin	No ventilation holes.	N/A
9.1.4	Terminal devices tested with 1 mm x 20 mm test pin (10 N); test probe D of IEC 61032	No such terminals.	N/A
	Terminal devices tested with 1 mm x 100 mm straight wire (1 N); test probe D of IEC 61032		N/A
9.1.5	Pre-set controls tested with 2.5 mm x 100 mm test pin (10 N); test probe C of IEC 61032	No such device provided.	N/A
9.1.6	No shock hazard due to stored charge on withdrawal of the mains plug; voltage (V) after 2 s .:		N/A
	If C is not greater than 0,1 µF no test needed	No nominal capacitance across the mains poles.	N/A
9.1.7	a) Enclosure sufficiently resistant to external force		P
	Test probe 11 of IEC 61032 for 10 s (50 N)		P
	b) Test hook of fig. 4 for 10 s (20 N)		P
	c) 30 mm diameter test tool for 5 s (100 or 250 N) :	100N	P
9.2	No hazard after removing a cover by hand	The enclosure of the appliance is fixed with screws, no risk of removing by hand.	N/A

IEC/EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict

10	INSULATION REQUIREMENTS		P
10.1	Insulation resistance (MΩ) at least 2 MΩ min. after surge test for basic and 4 MΩ min. for reinforced insulation	See below.	P
10.2	Humidity treatment 48 h or 120 h	Performed for 48h at temperature between 30°C and a relative humidity between 95%.	P
10.3	Insulation resistance and dielectric strength between mains terminals	(see appended table)	P
	Insulation Resistance and dielectric strength across BASIC or SUPPLEMENTARY insulation (Class I)		N/A
	Insulation resistance and dielectric strength across REINFORCED insulation (Class II)	Class II construction.	P

11	FAULT CONDITIONS		P
11.1	No shock hazard under fault condition	No electric shock during fault operation.	P
11.2	Heating under fault condition	See below.	P
	No hazard from softening solder	No solder point became soft.	P
	Flames extinguish within 10 seconds	No flame.	P
	Soldered terminations not used as protective mechanism		P
11.2.1	Measurement of temperature rises	(see appended table)	P
11.2.2	Temperature rise of accessible parts	(see appended table)	P
11.2.3	Temperature rise of parts, other than windings, providing electrical insulation	(see appended table)	P
	Temperature rise of printed circuit boards (PCB) exceeding the limits of table 3 by max. 100 K for max. 5 min	No points on the PCB exceed the limit.	N/A
	a) Temperature rise of printed circuit boards (PCB) to 20.1.3, exceeding the limits of table 3 by not more than 100 K for an area not greater than 2 cm ²		N/A
	b) Temperature rise of printed circuit boards (PCB) to 20.1.3 up to 300 K for an area not greater than 2 cm ² for a maximum of 5 min		N/A

IEC/EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
	Meets all the special conditions if conductors on printed circuit boards are interrupted		N/A
	Class I protective earthing maintained		N/A
11.2.4	Temperature rise of parts acting as a support or mechanical barrier	(see appended table)	P
11.2.5	Temperature rise of windings	(see appended table)	P
11.2.6	Temperature rise of parts not subject to the limits of 11.2.1 to 11.2.5		N/A

12	MECHANICAL STRENGTH		P
12.1.1	Bump test where mass >7 kg	Max. mass of receiver: 4kg.	N/A
12.1.2	Vibration test	No damage.	P
12.1.3	Impact hammer test	After test, dielectric strength test of clause 10.3 is performed. Result: no damage in the sense of the standard.	P
	Steel ball test	2J.	P
12.1.4	Drop test for portable apparatus where mass < 7 kg		P
12.1.5	Thermoplastic enclosures strain relief test	After 7 hours at temperature of 70°C and cooling down to room temperature, no shrinkage, distortion or loosening any enclosure part was noticeable on the adaptor. Test was performed for all sources of enclosure material.	P
12.2	Fixing of knobs, push buttons, keys and levers	No such parts provided.	N/A
12.3	Remote controls with hazardous live parts	No remote control provided.	N/A
12.4	Drawers (pull test 50 N, 10 s)	No drawers provided.	N/A
12.5	Antenna coaxial sockets providing isolation	No antenna coaxial sockets provided.	N/A
12.6	Telescoping or rod antennas construction	Not such a construction.	N/A
12.6.1	Telescoping or rod antennas securement		N/A

IEC/EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
13	CLEARANCE AND CREEPAGE DISTANCES)		P
13.1	Clearances in accordance with 13.3	Clearance measured according to annex E. Pollution degree 2 was considered.	P
	Creepage distances in accordance with 13.4	Creepage distances measured according to annex E. Pollution degree 2 was considered.	P
13.2	Determination of operating voltage		P
13.3	Clearances	See below.	P
13.3.1	General	(see appended table)	P
13.3.2	Circuits conductively connected to the mains comply with table 8 and, where applicable, table 9	(see appended table)	P
13.3.3	Circuits not conductively connected to the mains comply with table 10		N/A
13.3.4	Measurement of transient voltages		N/A
13.4	Creepage distances		P
	Creepage distances greater than table 11 minima	(see appended table)	P
13.5	Printed boards	Not coated PCB used.	N/A
13.5.1	Clearances and creepage distances between conductors on printed circuit boards, one of which may be conductively connected to the mains, as in fig. 10		N/A
13.5.2	Type B coated printed circuit boards complying with IEC 60664-3 (basic insulation only)		N/A
13.6	Conductive parts along uncemented joints clearances and creepage distances comply with 13.3 and 13.4	No such parts provided.	N/A
	Conductive parts along reliably cemented joints comply with 8.8		N/A
	Temperature cycle test and dielectric strength test		N/A
13.7	Enclosed, enveloped or hermetically sealed parts: not conductively connected to the mains: clearances and creepage distances as in table 12	Not such a construction.	N/A
13.8	Parts filled with insulating compound, meeting the requirements of 8.8		N/A

IEC/EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
14	COMPONENTS		P
14.1	Resistors		N/A
	a) Resistors between hazardous live parts and accessible metal parts	No such resistors provided.	N/A
	b) Resistors, other than between hazardous live parts and accessible parts		N/A
	Resistors separately approved		N/A
14.2	Capacitors and RC units	No such components.	N/A
	Capacitors separately approved		N/A
14.2.1	Y capacitors tested to IEC 60384-14, 2 nd edition		N/A
14.2.2	X capacitors tested to IEC 60384-14, 2 nd edition		N/A
14.2.3	Capacitors operating at mains frequency but not connected to the mains: tests for X2	No such capacitors provided.	N/A
14.2.5	Capacitors with volume exceeding 1750 mm ³ , where short-circuit current exceeds 0,2 A: compliance with IEC60384-1, 4.38 category B or better	Volume of other capacitors not exceeds 1750 mm ³ . Electrolytic capacitors provided with metal can.	N/A
	Capacitors with volume exceeding 1750 mm ³ , mounted closer to a potential ignition source than table 5 permits: compliance with IEC 60 384-1, 4.38 category B or better		N/A
	Shielded by a barrier acc. To 20.1.4/ table 21 or metal		P
14.3	Inductors and windings	See below.	P
	Comply with IEC 61558-1, IEC 61558-2 (as relevant) and clause 20.1.4		N/A
14.3.1	Transformers and inductors marked with manufacturer's name and type	Transformer: code number see appended table.	P
	Transformers and inductors separately approved ...	Tested with appliance.	N/A
14.3.2	General		P
	Insulation material complies with clause 20.1.4		P
14.3.3	Constructional requirements	See below	P
14.3.3.1	Clearances and creepage distances comply with clause 13	(see appended table 13.3 and 13.4)	P
14.3.3.2	Transformers meet the constructional requirements		P

IEC/EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
14.3.4.1	Class II transformers have adequate separation between hazardous live parts and accessible parts (double or reinforced insulation)	Reinforced or double insulation between primary winding/parts and secondary winding/parts. Details see appended table 13.3 and 13.4.	P
	Coil formers and partition walls > 0,4 mm	Sub-clause 8.8 above.	P
14.3.4.2	Class I transformers, with basic insulation and protective screening only if all 7 conditions of 14.3.4.2 are met		N/A
14.3.4.3	Separating transformers with at least basic insulation		N/A
14.3.5.1	Class II transformers have adequate insulation between hazardous live parts and accessible parts (double or reinforced insulation)	See sub-clause 14.3.4.1 above.	P
	Coil formers and partition walls > 0,4 mm		P
14.3.5.2	Class I transformers have adequate insulation between hazardous live parts and accessible conductive parts or those conductive parts or protective screens connected to a protective earth terminal		N/A
	Winding wires connected to protective earth have adequate current-carrying capacity		N/A
14.4	High voltage components	No component operating at voltage exceeding 4kV.	N/A
	High-voltage components and assemblies: U > 4 kV (peak) separately approved		N/A
	Component meets category V-1 of IEC 60707		N/A
14.4.1	High voltage transformers and multipliers tested as part of the submission		N/A
14.4.2	High voltage assemblies and other parts tested as part of the submission		N/A
14.5	Protective devices	See below.	P
	Protective devices used within their ratings	See sub-clause 14.5.2.1.	P
	External clearances and creepage distances meet requirement of clause 13 for the voltage across the device when opened	(see appended table 13.3 and 13.4)	P
14.5.1.1	a) Thermal cut-outs separately approved	No such components.	N/A
	b) Thermal cut-outs tested as part of the submission		N/A

IEC/EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
14.5.1.2	a) Thermal links separately approved	VDE approved.	P
	b) Thermal links tested as part of the submission		N/A
14.5.1.3	Thermal devices re-settable by soldering	No such components provided.	N/A
14.5.2.1	Fuse-links in the mains circuit according to IEC 60127	Fuse link is in secondary circuit.	N/A
14.5.2.2	Correct marking of fuse-links adjacent to holder		N/A
14.5.2.3	Not possible to connect fuses in parallel		N/A
14.5.2.4	Not possible to touch hazardous live parts when replacing fuse-links without the use of a tool		N/A
14.5.3	PTC-S thermistors comply with IEC 60730-1	No such components provided.	N/A
	PTC-S devices (15 W) category V-1 or better		N/A
14.5.4	Circuit protectors have adequate breaking capacity and their position is correctly marked	No such device.	N/A
14.6	Switches	(see appended table)	P
14.6.1 a)	Separate testing to IEC 61058 including: 10 000 operations Normal pollution suitability Resistance to heat and fire level 3 and Make and break speed independent of speed of actuation V-0 compliance with annex G, G.1.1	Approved. 10000 operating cycles; normal pollution situation, level 3; and flammability material of plastic material: V-0, VDE approved.	P
14.6.1 b)	Tested in the apparatus:		N/A
	Switch controlling > 0.2A with open contact voltage > 35 V (peak)/24 V dc complying with 14.6.3, 14.6.4 and V-0 in annex G, G.1.1		N/A
	Switch controlling > 0.2A with open contact voltage < 35 V (peak)/24 V dc complying with 14.6.3 and V-0 in annex G, G.1.1		N/A
	Switch controlling < 0.2A with open contact voltage > 35 V (peak)/24 V dc complying with 14.6.4 and V-0 in annex G, G.1.1		N/A
14.6.2	Switch tested to 14.6.1 b) constructed to IEC 61058-1 subclause 13.1 and has making/breaking action independent of speed of actuation		N/A

IEC/EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
14.6.3	Switch tested to 14.6.1 b) compliant with IEC 61058-1 subclause 16.2.2 d) and m) not attaining excessive temperatures in use		N/A
14.6.4	Switch tested to 14.6.1 b) has adequate dielectric strength		N/A
14.6.5	Mains switch controlling mains socket outlets additional tests to IEC 60058-1		N/A
	Socket outlet current marking correct		N/A
14.7	Safety interlocks	No safety interlocks.	N/A
	Safety interlocks to 2.8 of IEC 60950		N/A
14.8	Voltage setting devices and the like	No such component.	N/A
	Voltage setting device not likely to be changed accidentally		N/A
14.9	Motors	No motor.	N/A
14.9.1	Endurance test on motors		N/A
	Motor start test		N/A
	Dielectric strength test		N/A
14.9.2	Not adversely affected by oil or grease etc.		N/A
14.9.3	Protection against moving parts		N/A
14.9.4	Motors with phase-shifting capacitors, three-phase motors and series motors meet clause. B.8, B.9 and B.10 of IEC 60950, Annex B		N/A
14.10	Batteries	Batteries used for transmitter.	P
14.10.1	Batteries mounted with no risk of accumulation of flammable gases		P
14.10.2	No possibility of recharging non-rechargeable batteries		N/A
14.10.3	Recharging currents and times within manufacturers limits		N/A
	Lithium batteries discharge and reverse currents within the manufacturers limits		N/A
14.10.4	Battery mould stress relief	No such batteries.	N/A
14.10.5	Battery drop test		N/A
14.11	Optocouplers	No such components provided.	N/A
	Optocouplers comply with Cl. 8		N/A

IEC/EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
	Internal and external dimensions to 13.1. or alternatively 13.6 (jointed insulation)		N/A
14.12	Surge suppression varistors	No such components provided.	N/A
	Comply with IEC 61051-2		N/A
	Not connected between mains and accessible parts except for earthed parts of permanently connected apparatus		N/A
	Complies with the current pulse, fire hazard and thermal stress requirements of 14.12		N/A
15	TERMINALS		P
15.1.1	Mains plug, appliance inlet, interconnection couplers and mains socket-outlet meet the appropriate standard	For adapter D41WI150500-12/1 and D48WI151000-12/1: A mains plug that is part of direct plug-in equipment provided For adapter D57TI151500-12/1: Plug with non-detachable power cord provided. For details see table 14.	P
	Overloading of plugs or appliance inlets prevented if the apparatus has mains socket outlets	No mains socket outlets provided.	N/A
	Overloading of internal wiring prevented if the apparatus has mains socket outlets	No mains socket outlets provided.	N/A
15.1.2	Connectors for antenna, earth, audio, video or data:		P
	No risk of insertion in mains socket-outlets		P
	No risk of insertion into audio or video: outlets marked with the symbol of 5.2		N/A
15.1.3	Output terminals of a.c. adaptors or similar devices not compatible with household mains socket-outlets	The output cord is not intended to be inserted into mains socket-out.	P
15.2	Provision for protective earthing		N/A
	Accessible conductive parts of Class I equipment reliably connected to earth terminal, within equipment	Class II apparatus.	N/A
	Protective earth conductors correctly coloured		N/A

IEC/EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
	Equipment with non-detachable mains cord provided with separate protective earth terminal near mains input		N/A
	Protective earth terminal resistant to corrosion		N/A
	Earth resistance test: < 0,1 Ω at 25 A		N/A
15.3	Terminals for external flexible cords and for permanent connection to the mains supply	For adapter D57T1151500-12/1 only	P
15.3.1	Adequate terminals for connection of permanent wiring		N/A
15.3.2	Reliable connection of non-detachable cords:	Double fixing methods used, no possible to become detached.	P
	Not soldered to conductors of a printed circuit board		N/A
	Adequate clearances and creepage distances between connections should a wire break away		N/A
	Wire secured by additional means to the conductor		P
15.3.3	Screws and nuts clamping conductors have adequate threads: ISO 261, ISO 262 or similar	No such fixing.	N/A
15.3.4	Soldered conductors wrapped around terminal prior to soldering or held in place by additional means		N/A
	Clamping of conductor and insulation if not soldered or held by screws		N/A
15.3.5	Terminals allow connection of appropriate cross-sectional area of conductors, for the rated current of the equipment	No such terminals.	N/A
15.3.6	Terminals to 15.3.3 have sizes required by table 16		N/A
15.3.7	Terminals clamp conductors between metal and have adequate pressure		N/A
	Terminals designed to avoid conductor slipping out when tightened or loosened		N/A
	Terminals adequately fixed to avoid loosening when the clamping is tightened or loosened and stress on internal wiring is avoided		N/A
15.3.8	Terminals carrying a current more than 0,2 A: contact pressure not transmitted by insulating material except ceramic		N/A

IEC/EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
15.3.9	Termination of non-detachable cords: wires terminated near to each other		P
	Terminals located and shielded: test with 8 mm strand		P
15.4	Devices forming a part of the mains plug	For adapter D48WI151000-12/1 only Adapter D41WI150500-12/1 is approved by TUV Rheinland.	P
15.4.1	No undue strain on mains socket-outlets	For Euro-plug of : 0,24Nm	P
15.4.2	Device complies with standard for dimensions of mains plugs	Adapter D41WI150500-12/1 is approved by TUV Rheinland according to EN 50075. D48WI151000-12/1 has the same mains plug part with D41WI150500-12/1	P
15.4.3	Device has adequate mechanical strength (tests a,b,c)	After test the device complied with the requirements of this standard.	P

16	EXTERNAL FLEXIBLE CORDS (For adapter D57TI151500-12/1 only)		P
16.1	Mains cords sheathed type, complying with IEC 60227 for PVC or IEC 60245 for synthetic rubber cords	The power cord is VDE approved type (H05VVH2-F, 0,75mm ² x2)	P
	Non-detachable cords for Class I have green/yellow core for protective earth	Class II apparatus.	N/A
16.2	Mains cords conductors have adequate cross-sectional area for rated current consumption of the equipment	Normal cross section is 0,75mm ² , the measured max. current under normal operation was 0,169A.	P
16.3	a) Flexible cords not complying with 16.1, used for interconnections between separate units of equipment used in combination and carrying hazardous live voltages, have adequate dielectric strength		N/A
	b) Flexible cords not complying with 16.1, withstand bending and mechanical stress (3.2 of IEC 60227-2)		N/A

IEC/EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
16.4	Flexible cords used for connection between equipment have adequate cross-sectional areas to avoid temperature rise under normal and fault conditions		N/A
16.5	Adequate strain relief on external flexible cords	Cord anchorage used on external flexible cord. It provided adequate strain relief.	P
	Not possible to push cord back into equipment	Displaced by 1,0mm	P
	Strain relief device unlikely to damage flexible cord		P
	For mains cords of Class I equipment, hazardous live conductors become taut before earth conductor		N/A
16.6	Apertures for external flexible cord: no risk of damage to the cord during assembly or movement in use		P
16.7	Transportable musical instruments and amplifiers fitted with detachable cord set with appliance inlet to IEC 60320-1		N/A
	Transportable musical instruments and amplifiers fitted with detachable cord sets or with means of stowage to protect the cord		N/A

17	ELECTRICAL CONNECTIONS AND MECHANICAL FIXINGS		P
17.1	Torque test to table 20:		N/A
	- screws into metal: 5 times	Screws installed on the enclosure of receiver are Ø3. Tested with 0,5Nm for 5 times.	P
	- screws into non-metallic material: 10 times		N/A
17.2	Correct introduction into female threads in non-metallic material		N/A
17.3	Cover fixing screws: captive		N/A
	Non-captive fixing screws: no hazard when replaced by a screw whose length is 10 times its diameter		N/A
17.4	No loosening of conductive parts carrying a current > 0,2 A	All conductive parts are well secured.	P
17.5	Contact pressure not transmitted through plastic other than ceramic for connections carrying a current > 0,2 A		N/A

IEC/EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
17.6	Stranded conductors of flexible supply cords carrying a current > 0,2 A with screw terminals not consolidated by solder		N/A
17.7	Cover fixing devices other than screws have adequate strength and their positioning is unambiguous	No cover fixing devices provided.	N/A
17.8	Fixing devices for detachable legs or stands provided	No such devices provided.	N/A
17.9	Internal pluggable connections, affecting safety, unlikely to become disconnected	Tested with 2N force, no disconnection occurred.	P

18	MECHANICAL STRENGTH OF PICTURE TUBES AND PROTECTION AGAINST THE EFFECTS OF IMPLOSION		N/A
	Picture tube separately approved to IEC 61965:	No picture tube provided.	N/A
	Picture tube separately approved to 18.1		N/A
18.1	Picture tubes > 16 cm intrinsically protected		N/A
	Non-intrinsically protected tubes > 16 cm used with protective screen		N/A
	Protective film as part of implosion protection: edges covered by enclosure		N/A
18.2	Intrinsically protected tubes: tests on 12 samples		N/A
18.2.1	Samples subject to ageing: 6		N/A
18.2.2	Samples subject to implosion test: 6		N/A
18.2.3	Samples subject to mechanical strength test (steel ball): 6		N/A
18.3	Non-intrinsically protected tubes tested to 18.3		N/A

19	STABILITY AND MECHANICAL HAZARDS		P
	Mass of the equipment exceeding 7 kg	Max. mass of receiver: 4kg.	N/A
	Apparatus intended to be fastened in place – suitable instructions		N/A
19.1	Test on a plane, inclined at 10° to the horizontal		N/A
19.2	100 N force applied vertically downwards		N/A
19.3	100 N force, or 13% of weight, applied horizontally to point of least stability.		N/A

IEC/EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
19.4	Edges or corners not hazardous		P
19.5	Glass surfaces (exc.laminated) with an area exceeding 0,1 m ² or maximum dimension > 450 mm, pass the test of 19.5.1		N/A
19.6	Wall or ceiling mountings adequate		N/A

20	RESISTANCE TO FIRE		P
20.1	Electrical components and mechanical parts		P
	a) Exemption for components contained in an enclosure of material V-0 to IEC 60695-11-10 with openings not exceeding 1 mm in width	See sub-clause 20.1.4.	P
	b) Exemption for small components as defined in 20.1	Small components mounted on a PCB with rating as described in table 14. Furthermore, refer to sub-clause 20.1.4.	P
20.1.1	Electrical components meet the requirements of Clause 14 or 20.1.4	See sub-clause 14 and 20.1.4.	P
20.1.2	Insulation of internal wiring working at voltages > 4 Kv or leaving an internal fire enclosure, or located within the areas mentioned in Table 21, not contributing to the spread of fire	Internal wiring working at voltage not exceeding 4kV.	N/A
20.1.3	Material of printed circuit boards on which the available power exceeds 15 W at a voltage between 50 V and 400 V (peak) a.c. or d.c. meets V-1 or better to IEC60707, unless used in a fire enclosure	Flammability of PCB: V-0 or better.	P
	Material of printed circuit boards on which the available power exceeds 15 W at a voltage >400 V (peak) a.c. or d.c. meets V-0 to IEC 60707		N/A
20.1.4	Components and parts not covered by 20.1.1, 20.1.2 and 20.1.3 (other than fire enclosures) mounted nearer to a potential ignition source than the distances in Table 21 comply with the relevant flammability category in Table 21	(see appended table 14)	P
	Components and parts as above but shielded from a potential ignition source, with the barrier area in accordance with Table 21 and fig. 13		N/A

IEC/EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
	Apparatus with voltages >4kV under normal operating conditions and distances to the enclosure exceed those specified Table 21, flammability classification HB40 or better is required for the enclosure.		N/A
20.2	Fire enclosure		N/A
20.2.1	Potential ignition sources with open circuit voltage > 4 kV (peak) a.c. or d.c. contained in a fire enclosure to V-1	No such high voltage.	N/A
20.2.2	Internal fire enclosures with openings not exceeding 1 mm in width and with openings for wires completely filled		N/A
20.2.3	Requirements of 20.2.1 and 20.2.2 met by an internal fire enclosure		N/A

A	APPENDIX A, ADDITIONAL REQUIREMENTS FOR APPARATUS WITH PROTECTION AGAINST SPLASHING WATER		N/A
A.5.1	j) Marked with IPX4 (IEC 60529), 5.4.1 a) does not apply	IP20	N/A
A.10.2.1	Enclosure provides protection against splashing water		N/A
A.10.2.2	Humidity treatment carried out for 7 days		N/A

B	APPENDIX B, APPARATUS TO BE CONNECTED TO THE TELECOMMUNICATION NETWORKS		N/A
	Complies with IEC 62151 clause 1	Apparatus will not be connected to public telephone system.	N/A
	Complies with IEC 62151 clause 2		N/A
	Complies with IEC 62151 clause 3 but with 3.5.4 modified to 2.4.10 of this standard		N/A
	Complies with IEC 62151 clause 4 but with 4.1.2, 4.1.3 and 4.2.1.2 modified in accordance with annex B of this standard		N/A
	Complies with IEC 62151 clause 5 but with 5.3.1 modified in accordance with annex B of this standard		N/A
	Complies with IEC 62151 clause 6		N/A

IEC/EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
	Complies with IEC 62151 clause 7		N/A
	Complies with IEC 62151 annex A, B and C		N/A

L	APPENDIX L, ADDITIONAL REQUIREMENTS FOR ELECTRONIC FLASH APPARATUS FOR PHOTOGRAPHIC PURPOSES.		N/A
L5.4	Marking and Instructions	Not such apparatus.	N/A
L9.1.1	Terminals to connection to synchronizer not HAZARDOUS LIVE		N/A
L7.1.5 & L11.2.6	Lithium batteries meet permissible temp rise in Table 3 , unless comply with 6.3.2 of IEC 60086-4		N/A
L14.6.6	Mains switch characteristics appropriate to its function under normal conditions		N/A

7.1 a)	TABLE: temperature rise measurements				P	
	Power consumption in the OFF/Stand-by	0W		--		
	Position of the functional switch (W)	--		--		
Operating conditions						
Model UPX-81DR, normal operation, test time: 2,5hrs						
	Un (V)	In (mA)	Pn (W)	Pout (W)		
	253V/50Hz	152,0	19,0	--		
	230V/50Hz	89,5	14,0	--		
	207V/50Hz	73,9	13,0	--		
	Loudspeaker impedance (Ω)	--		--		
	Several loudspeaker systems	--		--		
	Marking of loudspeaker terminals	--		--		
Monitored point:		dT (K)		Limit dT (K)		
Test condition		253V / 50Hz		--		
Primary winding of transformer (adapter)		70,2		75		
Secondary winding of transformer (adapter)		72,6		75		
Iron core of transformer (adapter)		58,3		75		
PCB under diode (adapter)		69,9		95		
Primary lead wire (adapter)		37,5		70		
Output cord (adapter)		45,8		90		
Inside enclosure (adapter)		58,4		60		
Outside enclosure (adapter)		38,3		60		
PCB under TR2 (receiver)		40,5		95		
PCB under TR3 (receiver)		30,2		95		
Electrolytic capacitor C47		23,9		50		
Power switch		4,6		50		
Outside enclosure (receiver)		12,1		60		
Winding temperature rise measurements				--		
	Ambient temperature t1 (°C)	20,8		--		
	Ambient temperature t2 (°C)	21,2		--		
Temperature rise dT of winding:		R ₁ (Ω)	R ₂ (Ω)	dT (K)	Limit dT (K)	Insulation class
Primary winding of transformer		91,6	119,8	78,2	85	Class B

Secondary winding of transformer	--	--	--	--	--
<p>Note:</p> <ol style="list-style-type: none"> The temperatures were measured under worst case normal mode defined in subclause 4.2.1. The appliance is intended to be used in moderate climate, so the basic ambient temperature is 35°C, maximum temperatures are calculated as following: <u>Winding wire of switching and filter transformer:</u> - Class B → $\Delta T_{max} = 85\text{ K} - 10\text{ K} = 75\text{ K}$ (thermal couple method used) <u>Components with a maximum temperature of :</u> - Primary lead wire → $\Delta T_{max} = (105-35)\text{ K} = 70\text{ K}$ - PCB → $\Delta T_{max} = (130-35)\text{ K} = 95\text{ K}$ - Output cord (covered by heat shrinkable tube) → $\Delta T_{max} = (125-35)\text{ K} = 90\text{ K}$ - Enclosure (inside) → $\Delta T_{max} = (95-35)\text{ K} = 60\text{ K}$ 					

7.1 b)	TABLE: temperature rise measurements	P
	Power consumption in the OFF/Stand-by	0W
	Position of the functional switch (W)	--

Operating conditions			
Model UPX-82DR, normal operation, test time: 3,0hrs			
Un (V)	In (mA)	Pn (W)	Pout (W)
253V/50Hz	168.6	30.1	--
230V/50Hz	134.0	25.0	--
207V/50Hz	126.9	23.0	--
	Loudspeaker impedance (Ω)	--	--
	Several loudspeaker systems	--	--
	Marking of loudspeaker terminals	--	--
Monitored point:		dT (K)	Limit dT (K)
Test condition		253V / 50Hz	--
Primary winding of transformer (adapter)		48,5	75
Secondary winding of transformer (adapter)		56,5	75
Iron core of transformer (adapter)		46,1	75
PCB under diode (adapter)		83,8	95
Primary lead wire (adapter)		28,0	70
Output cord (adapter)		44,4	90
Inside enclosure (adapter)		43,6	60

Outside enclosure (adapter)		26,6	60		
PCB under TR2 (receiver)		42,9	95		
PCB under TR3 (receiver)		32,5	95		
Electrolytic capacitor C47		28,5	50		
Power switch		6,0	50		
Outside enclosure (plastic part of receiver)		19,1	60		
Winding temperature rise measurements					
Ambient temperature t1 (°C)		17,0	—		
Ambient temperature t2 (°C)		18,1	—		
Temperature rise dT of winding:	R ₁ (Ω)	R ₂ (Ω)	dT (K)	Limit dT (K)	Insulation class
Primary winding of transformer	50,3	62,4	59,4	85	Class B
Secondary winding of transformer	--	--	--	--	--

Note:

- The temperatures were measured under worst case normal mode defined in subclause 4.2.1.
- The appliance is intended to be used in moderate climate, so the basic ambient temperature is 35°C, maximum temperatures are calculated as following:

Winding wire of switching and filter transformer:

- Class B → $\Delta T_{max} = 85\text{ K} - 10\text{ K} = 75\text{ K}$ (thermal couple method used)

Components with a maximum temperature of :

- Primary lead wire → $\Delta T_{max} = (105-35)\text{ K} = 70\text{ K}$
- PCB → $\Delta T_{max} = (130-35)\text{ K} = 95\text{ K}$
- Output cord(covered by heat shrinkable tube) → $\Delta T_{max} = (125-35)\text{ K} = 90\text{ K}$
- Enclosure (inside) → $\Delta T_{max} = (95-35)\text{ K} = 60\text{ K}$

7.1 c)	TABLE: temperature rise measurements			P
	Power consumption in the OFF/Stand-by	0W		--
	Position of the functional switch (W)	--		—
Operating conditions				
Model UB-82DR, normal operation, test time: 2,5hrs				
	Un (V)	In (mA)	Pn (W)	Pout (W)
	253V/50Hz	37.4	6.93	--
	230V/50Hz	34.8	6.12	--
	207V/50Hz	33.3	5.37	--
	Loudspeaker impedance (Ω)	--		—

	Several loudspeaker systems	--	--		
	Marking of loudspeaker terminals	--	--		
Monitored point:		dT (K)	Limit dT (K)		
Test condition		253V / 50Hz	--		
Primary winding of transformer (adapter)		39,9	75		
Secondary winding of transformer (adapter)		50,3	75		
Iron core of transformer (adapter)		43,3	55		
PCB under diode (adapter)		39,4	95		
Primary lead wire (adapter)		17,9	70		
Output cord (adapter)		21,0	90		
Inside enclosure (adapter)		36,4	60		
Outside enclosure (adapter)		20,5	60		
PCB under TR3 (receiver)		21,2	95		
Outside enclosure (plastic part of receiver)		7,2	60		
	Winding temperature rise measurements		--		
	Ambient temperature t1 (°C)	25,6			
	Ambient temperature t2 (°C)	26,1			
Temperature rise dT of winding:	R ₁ (Ω)	R ₂ (Ω)	dT (K)	Limit dT (K)	Insulation class
Primary winding of transformer	265,7	317,8	50,5	85	Class B
Secondary winding of transformer	2,81	3,42	56,0	85	Class B
Note:					
1. The temperatures were measured under worst case normal mode defined in subclause 4.2.1.					
2. The appliance is intended to be used in moderate climate, so the basic ambient temperature is 35°C, maximum temperatures are calculated as following:					
<u>Winding wire of switching and filter transformer:</u>					
- Class B → ΔT _{max} = 85 K – 10 K = 75 K (thermal couple method used)					
<u>Components with a maximum temperature of :</u>					
- Primary lead wire → ΔT _{max} = (105-35) K = 70 K					
- PCB → ΔT _{max} = (130-35) K = 95 K					
- Output cord (covered by heat shrinkable tube) → ΔT _{max} = (125-35) K = 90 K					
- Enclosure (inside) → ΔT _{max} = (95-35) K = 60 K					

7.2	TABLE: softening temperature of thermoplastics			N/A
Temperature T of part	T – normal conditions (°C)	T – fault conditions (°C)	T softening (°C)	
--	--	--	--	

10.3	TABLE: insulation resistance measurements		P
Insulation resistance R between:	R (MΩ)	Required R (MΩ)	
Poles of supply (fuse opened)	300	2	
Poles of supply and accessible terminals	300	4	
Primary winding to secondary winding of the transformer	300	4	
Primary winding to iron core of transformer	300	4	

10.3	TABLE: electric strength measurements		P
Test voltage applied between:	Test voltage (V)	Breakdown	
Poles of supply (fuse opened)	AC1500	No	
Poles of supply and accessible terminals	AC3000	No	
Primary winding to secondary winding of the transformer	AC3000	No	
Primary winding to iron core of transformer	AC3000	No	
Remark:			

11.2 a)	TABLE: summary of fault condition tests		P
Voltage (V) 0,9 or 1,1 times rated voltage	AC253V, 50Hz		--
Ambient temperature (°C)	35		--
Monitored point: Under fault conditions specified below	dT (K)	Limit dT (K)	
Model UPX-81DR			
Monitored point: Under fault condition of short-circuited D4 (receiver)	--	--	
Input voltage: 253V, AC current: 152,0mA→65,5mA, 20 min, F1 operated, no hazards, repeated 3 times.	--	--	
Monitored point: Under fault condition of short-circuited C47 (receiver)	--	--	
Input voltage: 253V, AC current: 152,0mA→65,5mA, 20 min, F1 operated, no hazards, repeated 3 times.	--	--	

Monitored point: Under fault condition of short-circuited C39 (receiver)	--	--
Input voltage: 253V, AC current: 152,0mA→65,5mA, 20 min, F1 operated, no hazards, repeated 3 times.	--	--
Monitored point: Under fault condition of short-circuited D1 (adapter)	--	--
Input voltage: 253V, AC current: 152,0mA→792,0mA, after 2min, thermal link opened, no hazards.	--	--
Primary winding of transformer	116,2	130
Secondary winding of transformer	117,3	130
Primary lead wire of adapter	31,6	70
Output cord of adapter	35,8	90
PCB under diode of adapter	84,7	95
Enclosure of adapter	54,8	65
Monitored point: Under fault condition of short-circuited C1 (adapter)	--	--
Input voltage: 253V, AC current: 152,0mA→792,0mA, after 3min, thermal link opened, no hazards.	--	--
Primary winding of transformer	117,2	130
Secondary winding of transformer	118,0	130
Primary lead wire of adapter	32,1	70
Output cord of adapter	37,5	90
PCB under diode of adapter	89,2	95
Enclosure of adapter	56,1	65
Winding temperature rise measurements		--
Ambient temperature t1 (°C)	--	--
Ambient temperature t2 (°C)	--	--

Note:

- The temperatures were measured under worst case normal mode defined in subclause 4.2.1.
- The appliance is intended to be used in moderate climate, so the basic ambient temperature is 35°C, maximum temperatures are calculated as following:
Winding wire of switching and filter transformer:
 - Class B → $\Delta T_{max} = 140\text{ K} - 10\text{ K} = 130\text{ K}$ (thermal couple method used)
Components with a maximum temperature of :
 - Lead wire → $\Delta T_{max} = (105-35)\text{ K} = 70\text{ K}$
 - PCB → $\Delta T_{max} = (130-35)\text{ K} = 95\text{ K}$

11.2 b)	TABLE: summary of fault condition tests		P
	Voltage (V) 0,9 or 1,1 times rated voltage	AC253V, 50Hz	—
	Ambient temperature (°C)	35	—
Monitored point:		dT (K)	Limit dT (K)
Under fault conditions specified below			
Model UPX-82DR			
Monitored point:		—	—
Under fault condition of short-circuited D4 (receiver)			
Input voltage: 253V, AC current: 168,6mA→133,3mA, 20 min, F1 operated, one channel no output, no hazards, repeated 3 times.		--	--
Monitored point:		—	—
Under fault condition of short-circuited C47 (receiver)			
Input voltage: 253V, AC current: 168,6mA→133,3mA, 20 min, F1 operated, one channel no output, no hazards, repeated 3 times.		--	--
Monitored point:		—	—
Under fault condition of short-circuited C39 (receiver)			
Input voltage: 253V, AC current: 168,6mA→133,3mA, 20 min, F1 operated, one channel no output, no hazards, repeated 3 times.		--	--
Monitored point:		—	—
Under fault condition of short-circuited D1 (adapter)			
Input voltage: 253V, AC current: 168,6mA→15mA, fuse (5A) opened immediately, repeated 3 times, no hazards.		--	--
Monitored point:		—	—
Under fault condition of short-circuited C1 (adapter)			
Input voltage: 253V, AC current: 168,6mA→15mA, fuse (5A) opened immediately, repeated 3 times, no hazards.		--	--
Winding temperature rise measurements			—

	Ambient temperature t1 (°C)	--	---
	Ambient temperature t2 (°C)	--	---
<p>Note:</p> <p>1. The temperatures were measured under worst case normal mode defined in subclause 4.2.1.</p> <p>2. The appliance is intended to be used in moderate climate, so the basic ambient temperature is 35°C, maximum temperatures are calculated as following:</p> <p><u>Winding wire of switching and filter transformer:</u></p> <p>- Class B → $\Delta T_{max} = 140K - 10 K = 130 K$ (thermal couple method used)</p> <p><u>Components with a maximum temperature of :</u></p> <p>- Lead wire → $\Delta T_{max} = (105-35) K = 70 K$</p> <p>- PCB → $\Delta T_{max} = (130-35) K = 95 K$</p>			

11.2 c)	TABLE: summary of fault condition tests		P
	Voltage (V) 0,9 or 1,1 times rated voltage	AC253V, 50Hz	---
	Ambient temperature (°C)	35	---
Monitored point:		dT: (K)	Limit dT: (K)
Under fault conditions specified below			
Model UB-82DR			
Monitored point:		---	---
Under fault condition of short-circuited D6(adapter)			
Input voltage: 253V, AC current: 37.4mA → 21.5mA, F56 operated immediately, no hazards, repeated 3 times.		--	--
Monitored point:		---	---
Under fault condition of short-circuited C157(adapter)			
Input voltage: 253V, AC current: 37.4mA → 21.5mA, F56 operated immediately, no hazards, repeated 3 times.		--	--
Monitored point:		---	---
Under fault condition of short-circuited output load(adapter)			
Input voltage: 253V, AC current: 37.4mA → 21.5mA, F56 operated immediately, no hazards, repeated 3 times.		--	--
Winding temperature rise measurements			---
	Ambient temperature t1 (°C)	--	---
	Ambient temperature t2 (°C)	--	---
<p>Note:</p> <p>1. The temperatures were measured under worst case normal mode defined in subclause 4.2.1.</p> <p>2. The appliance is intend to be used in moderate climate, so the basic ambient temperature is 35°C.</p>			

13	TABLES: clearances and creepage distances						P
Rated supply voltage:	230V~		Pollution degree:	2		Material Group:	IIIa or IIIb
2 N force on internal parts applied:						Yes	
30 N force on outside of conductive enclosure applied:						Yes	
Location		Operating Voltage		Clearance (mm)		Creepage (mm)	
		V rms	V peak	Min	Actual	Min	Actual
Circuits conductively connected to the mains: see note below.							
UL-82DR							
Primary winding to iron core (transformer)		250	420	2,0	3,2	2,5	3,2
Between thermal-link two pin(transformer)		250	420	2,0	2,7	2,5	2,7
Secondary winding to iron core(transformer)		250	420	2,0	3,1	2,5	3,1
Primary winding to Secondary winding(transformer)		250	420	4,0	6,3	5,0	6,3
UPX-81DR							
Primary winding to iron core (transformer)		250	420	2,0	3,4	2,5	3,4
Between thermal-link two pin(transformer)		250	420	2,0	2,7	2,5	2,7
Secondary winding to iron core(transformer)		250	420	2,0	3,2	2,5	3,2
Primary winding to Secondary winding(transformer)		250	420	4,0	6,6	5,0	6,6
UL-82DR							
Primary winding to iron core (transformer)		250	420	2,0	3,1	2,5	3,1
Between thermal-link two pin(transformer)		250	420	2,0	2,7	2,5	2,7
Secondary winding to iron core(transformer)		250	420	2,0	3,3	2,5	3,3
Primary winding to Secondary winding(transformer)		250	420	4,0	6,4	5,0	6,4
Notes:							
"Min" = minimum required.							
"Actual" = Actual dimensions measured.							

14	TABLE: list of critical components and materials					P
Component	Manufacturer/ trademark	Type/model	Value/rating	Standard	Approval/ Reference	
Adapter	Yan Wo	D41W1150500-12/1	Input :230V ~ 50Hz, 85mA Output: DC 15V 500mA	EN 61558-1 EN 61558-2-6	TUV Rheinland	
Adapter	Yan Wo	D48W1151000-12/1	Input :230V ~ 50Hz, 150mA Output: DC 15V 1000mA	Applicable part of EN 60065: 2002+A1	Tested with appliance	
Adapter	Yan Wo	D57T1151500-12/1	Input :230V ~ 50Hz, 200mA Output: DC 15V 1500mA	Applicable part of EN 60065: 2002+A1	Tested with appliance	
PTC current limiter F1 (for Receivers used with adapter D41W1150500- 12/1)	INPAQ	PFR60VO40	60Vdc, Ihold=0,4A,	---	UL E218587	
(Alternative)	Raychem corp	RXE040	72Vdc, Ihold=0,4A,	---	UL E74889	
PTC current limiter F1 (for Receivers used with adapter D48W1151000-12/1 or D57T1151500- 12/1)	INPAQ	PFR60V110	60Vdc, Ihold=1,1 A,	---	UL E218587	
(Alternative)	Raychem corp	RXE110	72Vdc, Ihold=1,1A,	---	UL E74889	
PCB	Various	Various	V-0,130°C	---	UL Approval	
Switch	Light Country	R6	AC250V, 4A, 10E3, T85, level 3, V-0	EN61058-1	VDE 40016738	
(Alternative)	Light Country	R19A	AC250V, 6A, 10E3, T85, level 3, V-0	EN61058-1	VDE 40006923	
(Alternative)	Pronic	R13	AC250V, 6A, 10E3, T85, level 3, V-0	EN61058-1	VDE 40009019	
(Alternative)	Yueqing guanbao	XCK-017	AC250V, 6A, 10E3, T85, level 3, V-0	EN61058-1	VDE 40007803	
Components in adapter D48W1151000-12/1						
Magnet Wire	CHUEN YIH Wire Co., Ltd.	UEW-B	130°C	---	UL E154709	
(Alternative)	Feng Ching metal corp	UEW-B	130°C	---	UL E171495	
Insulation tape	Jingjang pressure sensitive glue fty	WF	130 °C	---	UL E165111	
(Alternative)	Garware	ER	105°C	---	UL E110983	
(Alternative)	Toray	X-10	130°C	---	UL E86511	

Bobbin	Eidupont	70G33L	130°C	--	UL E41938
(Alternative)	Eidupont	FR-50	130°C	--	UL E41938
Enclosure of adaptor	GE PLASTICS AMERICAS	SE100	95°C ,V-0	--	UL E121562
Thermal link	Aupo electronics	A4-1A-F	AC250V, 1A, 130°C	IEC/EN 60691-1	VDE 40005586
(Alternative)	Joint Force	L33	AC250V, 2A, 130°C	IEC/EN 60691-1	VDE 40008646
PCB	Long Chang	LC-02V0	V-0,130°C	--	UL E94733
(Alternative)	Various	Various	V-0,130°C	--	UL Approval
Primary lead wire	TA HENG ELECTRIC WIRE	1672	300V ,105°C, 22AWG	--	UL E50032
(Alternative)	Various	1672	300V ,105°C, 22AWG	--	UL Approval
Output cord	SHENZHEN DONG JU WIRE & CABLE CO LTD	2468	300V ,80°C, 22AWG	---	UL E189674
(Alternative)	LEADER ELECTRIC WIRE & CABLE CO LTD	2468	300V ,80°C, 22AWG	--	UL E154283
Heat shrinkable tube	Changyuan	Changbao 102	600V, VW-1, 125°C	--	UL E180908
(Alternative)	Various	Various	600V, VW-1, 125°C	--	UL Approval
Components in adapter D57T1151500-12/1					
Power Plug	Wan shun	WS-01	2.5A AC250V	--	VDE 116867
Power cord	TOP RESOURCES Co., Ltd.	0.75 ² mmX2C H03VVH2-F or H05VVH2-F	105°C	--	VDE 96237
Magnet Wire	CHUEN YIH Wire Co., Ltd.	UEW-B	130°C	--	UL E154709
(Alternative)	Feng Ching metal corp	UEW-B	130°C	--	UL E171495
Insulation tape	Jingjang pressure sensitive glue fty	WF	130 °C	--	UL E165111
(Alternative)	Garware	ER	105°C	--	UL E110983
(Alternative)	Toray	X-10	130°C	--	UL E86511
Bobbin	Eidupont	70G33L	130°C	--	UL E41938
(Alternative)	Eidupont	FR-50	130°C	--	UL E41938
Enclosure of adaptor	GE PLASTICS AMERICAS	SE100	95°C ,V-0	--	UL E121562

Thermal link	Aupo electronics	A4-1A-F	AC250V, 1A, 130°C	IEC/EN 60691-1	VDE 40005586
(Alternative)	Joint Force	L33	AC250V, 2A, 130°C	IEC/EN 60691-1	VDE 40008646
Current fuse	Walter	MDT	T5AL, AC250V, Ø6,35x31,5mm	--	Tested with appliance
PCB	Long Chang	LC-02V0	V-0, 130°C	--	UL E94733
(Alternative)	Various	Various	V-0,130°C	--	UL Approval
Output cord	SHENZHEN DONG JU WIRE & CABLE CO LTD	2468	300V ,80°C, 22AWG	---	UL E189674
(Alternative)	LEADER ELECTRIC WIRE & CABLE CO LTD	2468	300V ,80°C, 22AWG	---	UL E154283
Heat shrinkable tube	Changyuan	Changbao 102	600V, VW-1, 125°C	--	UL E180908
(Alternative)	Various	Various	600V, VW-1, 125°C	---	UL Approval
) an asterisk indicates a mark which assures the agreed level of surveillance					

ZB	ANNEX ZB TO EN 60 065, SPECIAL NATIONAL CONDITIONS		P
2.6.1	DK: certain types of Class I apparatus, see 15.1.1, may be provided with a plug not establishing earthing continuity when inserted in Danish socket-outlets	Class II.	N/A
13.3.1	NO: In Norway, due to IT power distribution system used, the a.c. MAINS supply voltage is considered to be equal to the line-to-line voltage, and will remain 230V in case of a single earth fault.		P
15.1.1	DK: mains cord for single-phase equipment having a rated current not exceeding 10 A shall be provided with a plug according to Heavy Current Regulations Section 107-2-D1	Direct plug-in	N/A
	DK: Class I equipment with socket-outlets with earthing contact, or which are intended to be used in locations where protection against indirect contact is required shall be provided with a plug in compliance with Standard Sheet DK 2-1a	Class II.	N/A
	DK: socket-outlets for providing power to Class II equipment with a rated current of 2,5 A shall have dimensions according to the drawing on page 179 of EN 60 065:2002 other dimensions shall be to IEC 60 083 Standard Sheet C 1a for portable socket-outlets	No such socket outlet.	N/A
	DK: mains socket-outlets with earthing contact shall comply with Heavy Current Regulations Section 107-2-D1, Standard Sheet DK 1-3a, DK 1-5a or DK 1-7a	No such socket outlet.	N/A
	GB: equipment fitted with a flexible cable or cord provided with a 13A BS 1363 plug as in Statutory Instrument 1768:94	Shall be evaluated during national approval.	N/A
	IE: equipment fitted with a flexible cable or cord provided with a 13 A plug in accordance with Statutory Instrument 525:97	Direct plug-in	N/A
	NO: mains socket-outlets on Class II equipment meet CEE Publication 7 with the following amendments:		N/A
	- dimensions 2,5 A, 250 V socket-outlets shall comply with Standard Sheet I page 180 of EN 60 065:2002	No such socket outlet.	N/A
	- mechanical strength 2,5 A, 250 V socket-outlets tested as specified in EN 60 065, 12.1.3		N/A
	- protecting rim also tested		N/A

	NO: method b) of 8.1 is not permitted. Double or reinforced insulation is required between parts connected to the mains and parts connected to the public telecommunications network	No TNV.	N/A
J.2	NO: In Norway, due to IT power distribution system used, the a.c. MAINS supply voltage is considered to be equal to the line-to-line voltage, and will remain 230V in case of a single earth fault.		P

ZC	ANNEX ZC TO EN 60 065, A-DEVIATIONS		N/A
5	DE: additional markings required in German language:		N/A
	- cathode ray tubes with an accelerating voltage between 20 kV and 30 kV (marking on the tube)	Not CRT.	N/A
	- TV receivers whose picture tube has an accelerating voltage between 20 kV and 30 kV	Not TV receiver.	N/A
	- TV receivers whose picture tube has an accelerating voltage greater than 30 kV		N/A
	- TV receivers whose picture tube has an accelerating voltage less than 20 kV		N/A
5.1	IT: additional markings on the outside of the TV receiver in Italian language	Not TV receiver.	N/A
	IT: user instructions in Italian language including a conformity declaration		N/A
	IT: certification number on the back cover		N/A
14	SE: Switches containing mercury such as thermostats, relays and level controllers are not allowed.	No switch.	N/A

National Deviation			
Clause	Requirement – Test	Result - Remark	Verdict
APPENDIX	European Group differences and Special national conditions according to CB Bulletin No. 112A, December 2006 (IEC Publication 60065 7th ed. 2001+ amd 1: 2005)		P
EXPLANATION FOR ABBREVIATIONS C= European group difference, S=Special national difference P=Pass, F=Fail, N/A=Not applicable. Placed in the column to the right.			
2.6.1 S	Denmark The following is added: Certain types of Class I apparatus, see Sub-clause 15.1.1, may be provided with a plug not establishing earthing continuity when inserted in Danish socket-outlets. Justification: Heavy Current Regulations, Section 107	No socket-outlet used.	N/A
3.1 C	Add the following indent at the end of the list: - exposure to excessive sound pressures from headphones or earphones. NOTE A new method of measurement is described in EN 50332-1, Sound system equipment: Headphones and earphones associated with portable audio equipment – Maximum sound pressure level measurement methodology and limit considerations – Part 1: General method for "one package equipment", and in EN 50332-2, Sound system equipment: Headphones and earphones associated with portable audio equipment – Maximum sound pressure level measurement methodology and limit considerations – Part 2: Guidelines to associate sets with headphones coming from different manufacturers.	No earphone.	N/A
4.1.1 C	Replace the text of the note by: NOTE For ROUTINE TEST reference is made to EN 50333.		N/A

National Deviation			
Clause	Requirement – Test	Result - Remark	Verdict
5 S	<p>Germany</p> <p>The following markings are required:</p> <p>a) In case of intrinsically ionizing radiation safe cathode-ray tubes with accelerating voltages between 20 kv and 30 kv:</p> <ul style="list-style-type: none"> - On the cathode-ray tube itself the wording: Eigensichere Kathodenstrahlröhre nach Anlage III Röntgen-verordnung. - Inside the apparatus: the maximum allowed accelerating voltage in kv, and the maximum allowed beam current in Ma. - On the outer of the apparatus: a notice in German language that produced X-rays are sufficiently shielded by the intrinsically safe cathode-ray tube. <p>b) In case of approval of the whole TV receiver with an accelerating voltage exceeding 20 kv:</p> <ul style="list-style-type: none"> - On the outer of the apparatus: the licence number .../.../Rö, and the following text: Die in diesem Gerät entstehende Röntgenstrahlung ist ausreichend abgeschirmt. Beschleunigungsspannung: max: ... kv. - Supplied with the apparatus: a copy of "Zulassungsschein", together with the notices required there. <p>c) In case of TV receivers with accelerating voltages not exceeding 20 kv:</p> <p>Die in diesem Gerät entstehende Röntgenstrahlung ist ausreichend abgeschirmt. Beschleunigungsspannung: max: ... kv.</p> <p><i>Justification:</i></p> <p>German ministerial decree against ionizing radiation (Röntgenverordnung), dated 1987-01-08.</p> <p>NOTE The German ministerial decree (Röntgenverordnung) is under revision.</p>	Not CRT TV set.	N/A

National Deviation			
Clause	Requirement – Test	Result - Remark	Verdict
5.1.i) C	<p>Add the following note:</p> <p>NOTE: For RATED POWER CONSUMPTION measurements of TVs reference is made to EN 60107.</p>		N/A
6.1 C	<p>Replace the entire subclause by:</p> <p>Apparatus including a potential source of ionizing radiation shall be so constructed that personal protection against ionizing radiation is provided under normal operating conditions and under fault conditions.</p> <p>Compliance is checked by measurement under the following conditions:</p> <p>In addition to the normal operating conditions, all controls adjustable from the outside BY HAND, by any object such as a tool or a coin, and those internal adjustments or pre-sets which are not locked in a reliable manner, are adjusted so as to give maximum radiation whilst maintaining an intelligible picture for 1 h, at the end of which the measurement is made.</p> <p>NOTE Soldered joints and paint lockings are examples of adequate locking. The amount of ionizing radiation is regulated by European Council Directive 96/29/Euratom of 13 May 1996. This directive requires that at any point 10 cm from the outer surface of the apparatus, the dose-rate shall not exceed 1µSv/h (0,1 Mr/h) taking account of the background level. 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.</p> <p>A picture is considered to be intelligible if the following conditions are met:</p> <ul style="list-style-type: none"> - a scanning amplitude of at least 70% of the usable screen width; - a minimum luminance of 50 cd/m² with locked blank raster provided by a test generator; - a horizontal resolution corresponding to at least 1,5 MHz in the centre, with a similar vertical degradation; not more than over flashover per 5 min. 	No ionizing radiation.	N/A

National Deviation			
Clause	Requirement – Test	Result - Remark	Verdict
6.1 S	<p>Germany</p> <p>The following requirement applies:</p> <p>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.</p> <p><i>Justification:</i></p> <p>German ministerial decree against ionizing radiation (Röntgenverordnung), in force since 2002-07-01, implementing the European Directive 96/29/EURATOM</p>	No cathode ray tube or ionizing radiation.	N/A
13.3.1 C	Delete note 4.	Delete.	N/A
13.3.1 S	<p>Norway</p> <p>To the second paragraph the following is added:</p> <p>In Norway, due to the IT power distribution system used, the a.c. MAINS supply voltage is considered to be equal to the line-to-line voltage, and will remain 230 V in case of a single earth fault.</p> <p><i>Justification:</i></p> <p>Based on a use in Norway of an IT power distribution system where the neutral is not provided.</p>	Shall be evaluated during national approval.	N/A
14 C	Delete note 4 and note5.	Delete.	N/A
15.1.1 C	Delete note 1 and note 2.	Delete.	N/A
15.1.1 S	<p>Denmark</p> <p>To the first paragraph the following is added:</p> <p>In Denmark, supply cords of single phase appliances having a rated current not exceeding 13 A shall be provided with a plug according to the Heavy Current Regulations Section 107-2-D1.</p> <p>Appliances of CLASS I provided with socket-outlets with earth contact or which are intended to be used in locations where protection against indirect contact is required according to the wiring rules shall be provided with a plug in accordance with the Heavy Current Regulations Section 107-2-D1 standard sheet DK 2-1a.</p> <p>To the second paragraph the following is added:</p>	Direct plug-in.	N/A

National Deviation			
Clause	Requirement – Test	Result - Remark	Verdict
	<p>Socket outlets intended for provided power to CLASS II apparatus with a rated current of 2,5 A shall have the following dimensions:</p> <p>Dimensions in mm Other dimensions shall be in compliance with the Heavy Current Regulations, Section 107-2-D1, Standard Sheet</p> <p>DKA 1-3 for portable socket-outlets. Shutters are not required.</p> <p>To the third paragraph the following is added:</p> <p>Mains socket-outlets with earthing contact shall be in compliance with the Heavy Current Regulations, Section 107-2-D1, Standard Sheet DK 1-3a, DK 1-5a or DK 1-7a.</p> <p>Justification:</p> <p>Heavy Current Regulations, Section 107</p>		
15.1.1 S	<p>Norway</p> <p>Mains socket-outlets mounted on CLASS II apparatus shall comply with the specifications given in CEE Publ. 7 as far as a Applicable, with the following amendments:</p> <p>§ 8 Dimensions</p> <p>a 2,5 A 250 V two-pole socket-outlets for electronic apparatus shall comply with the enclosed Standard Sheet I.</p> <p>§ 24 Mechanical strength</p> <p>a 2,5 A, 250 V socket-outlets for CLASS II electronic apparatus are tested as specified in 12.1.3 of EN 60065. Also the protecting rim shall be tested.</p> <p>Justification:</p> <p>Act of 24 May 1929 relating to supervision of electrical installation (TEA 1929/FEL 1998).</p>	Direct plug-in.	N/A

National Deviation			
Clause	Requirement – Test	Result - Remark	Verdict
15.1.1 S	<p>United Kingdom</p> <p>Apparatus 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 and plug shall be fitted with a "standard plug" in accordance with Statutory Instrument 1768: 1994: The Plugs and Sockets etc. (Safety) Regulations 1994, unless exempted by those Regulations.</p> <p>NOTE "Standard plug" is defined in SI 1768:1994 and essentially means an approved plug conforming to BS 1363 or an approved conversion plug.</p> <p>Justification: SI 1768: 1994</p>	Direct plug-in.	N/A
15.2 C	Delete note 2.	Delete.	N/A
16.1 C	Delete note 1.	Delete.	N/A
16.2 C	Delete the note.	Delete.	N/A
20 C	Delete note 2.	Delete.	N/A
Annex B C	<p>Replace note 1 by:</p> <p>In the CENELEC countries listed in IEC 62151, special national conditions apply.</p>	<p>Replace.</p> <p>No TNV circuit.</p>	N/A
Annex B S	<p>Norway</p> <p>Replace NOTE 1 by</p> <p>In the CENELEC countries listed in IEC 62151, special national conditions apply.</p> <p>Add the following:</p> <p>All subclauses given below are subclauses of IEC 62151:2000 (ref. Corrigendum 1 and 2 to IEC 62151).</p> <p>Subclause 4.1.1 (Corrigendum 2):</p> <p>Add after the first paragraph:</p> <p>NOTE - In Norway, CLASS I equipment which is intended for connection to the building installation via a non-industrial plug or a non-industrial appliance coupler, or both and in addition is intended for connection to other equipment or a network shall, if safety relies on connection to</p>	Not such equipment.	N/A

National Deviation			
Clause	Requirement – Test	Result - Remark	Verdict
	<p>protective earth or if surge suppressors are connected between the network terminals and ACCESSIBLE parts, have a marking stating that the equipment must be connected to an earthed mains socket -outlet.</p> <p>The marking text shall be as follows: "Apparatet skal tilkoples jordet stikkontakt"</p> <p>Subclause 5.3.1 (Corrigendum 1): Add after the first test specifications paragraph: NOTE 1 In Finland, Norway and Sweden, there are additional requirements for the insulation. Renummer the existing note as note 2.</p> <p>For additional requirements for the insulation in Sweden in the NOTE 1 the following text is added between the first and second paragraph (this text is identical to the text in EN 60950-1:2001):</p> <p>If this insulation is solid, including insulation forming part of a component, it shall at least consist of either</p> <ul style="list-style-type: none"> - two layers of thin sheet material, each of which shall pass the electric strength test below, or - one layer having a distance through insulation of at least 0,4 mm, which shall pass the electric strength test below. <p>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 the accordance with the compliance clause below and in addition:</p> <ul style="list-style-type: none"> - passes the test and inspection criteria of 13.6 with an electric strength test of 10.3 using the test voltage of 1,5 kV multiplied by 1,6, and - is subject to routine testing for electric strength during manufacturing, using a test voltage of 1,5 kV (for performance of the test see N.2.1). <p>It is permitted to bridge this insulation with a</p>		

National Deviation			
Clause	Requirement – Test	Result - Remark	Verdict
	<p>capacitor complying with IEC 60384-14:1993, subclass Y2. A capacitor classified Y3 according to IEC 60384-14:1993, may bridge this insulation under the following conditions:</p> <ul style="list-style-type: none"> - the insulation requirements are satisfied by having a capacitor classified Y3 as defined by IEC 60384-14, which in addition to the Y3 testing, is tested with an Impulse test of 2.5kV defined in IEC 62151, subclause 6.2.1; - the additional testing shall be performed on all the test specimens as described in IEC 60384-14; - the Impulse test of 2.5kV is to be performed before the Endurance Test in IEC 60384-14 in the sequence of tests as described in IEC 60384-14. Subclause 5.3.2 (Corrigendum 1): <p>Add after the fourth dash:</p> <p>NOTE - In Norway, exclusions are applicable for equipment which is intended for connection to the building installation wiring using screw terminals or other reliable means, and for equipment which is intended for connection to the building installation wiring via an industrial plug and socket -outlet or an appliance coupler, or both, complying with IEC 60309 or with a comparable national standard.</p>		
Annex B S	<p>Sweden</p> <p>Replace NOTE 1 by</p> <p>In the CENELEC countries listed in IEC 62151, special national conditions apply.</p> <p>Add the following:</p> <p>All subclauses given below are subclauses of IEC 62151:2000 (ref. Corrigendum 1 and 2 to IEC 62151).</p> <p>Subclause 4.1.1 (Corrigendum 2):</p> <p>Add after the first paragraph:</p> <p>NOTE - In Sweden, CLASS I equipment which is intended for connection to the building installation via a non-industrial plug or a non-industrial appliance coupler, or both and in addition is intended for connection to other equipment or a network shall, if safety relies on connection to protective earth or if surge suppressors are</p>	Not such equipment.	N/A

National Deviation			
Clause	Requirement – Test	Result - Remark	Verdict
	<p>connected between the network terminals and ACCESSIBLE parts, have a marking stating that the equipment must be connected to an earthed mains socket -outlet.</p> <p>The marking text shall be as follows: "Apparaten skall anslutas till jordat uttag"</p> <p>Subclause 5.3.1 (Corrigendum 1): Add after the first test specifications paragraph: NOTE 1 In Finland, Norway and Sweden, there are additional requirements for the insulation. Renumber the existing note as note 2.</p> <p>For additional requirements for the insulation in Sweden in the NOTE 1 the following text is added between the first and second paragraph (this text is identical to the text in EN 60950-1:2001): If this insulation is solid, including insulation forming part of a component, it shall at least consist of either</p> <ul style="list-style-type: none"> - two layers of thin sheet material, each of which shall pass the electric strength test below, or - one layer having a distance through insulation of at least 0,4 mm, which shall pass the electric strength test below. <p>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 the accordance with the compliance clause below and in addition:</p> <ul style="list-style-type: none"> - passes the test and inspection criteria of 13.6 with an electric strength test of 10.3 using the test voltage of 1,5 kV multiplied by 1,6, and - is subject to routine testing for electric strength during manufacturing, using a test voltage of 1,5 kV (for performance of the test see N.2.1). <p>It is permitted to bridge this insulation with a capacitor complying with IEC 60384-14:1993, subclass Y2. A capacitor classified Y3 according</p>		

National Deviation			
Clause	Requirement – Test	Result - Remark	Verdict
	<p>to IEC 60384-14:1993, may bridge this insulation under the following conditions:</p> <ul style="list-style-type: none"> - the insulation requirements are satisfied by having a capacitor classified Y3 as defined by IEC 60384-14, which in addition to the Y3 testing, is tested with an Impulse test of 2.5kV defined in IEC 62151, subclause 6.2.1; - the additional testing shall be performed on all the test specimens as described in IEC 60384-14; - the Impulse test of 2.5kV is to be performed before the Endurance Test in IEC 60384-14 in the sequence of tests as described in IEC 60384-14. <p>Subclause 5.3.2 (Corrigendum 1): Add after the fourth dash:</p> <p>NOTE - In Sweden, exclusions are applicable for equipment which is intended for connection to the building installation</p> <p>wiring using screw terminals or other reliable means, and for equipment which is intended for connection to the building installation wiring via an industrial plug and socket -outlet or an appliance coupler, or both, complying with IEC 60309 or with a comparable national standard.</p>		
Annex G C	Delete the note.	Deleted.	N/A
Annex J.2 C	Delete the notes of Table J.1.		N/A
Annex J.2 S	<p>Norway</p> <p>After Table J.1 the following is added:</p> <p>In Norway, due to the IT power distribution system used, the a.c. MAINS supply voltage is considered to be equal to the line-to-line voltage, and will remain 230 V in case of a single earth fault.</p> <p>Justification:</p> <p>Based on a use in Norway of an IT power distribution system where the neutral is not provided.</p>	Considered.	P
Annex N C	<p>Add after the introduction:</p> <p>For ROUTINE TEST reference is made to EN 50333.</p>	Added.	N/A

National Deviation																																	
Clause	Requirement – Test	Result - Remark	Verdict																														
Annex ZC S	Germany Delete the A-deviation for Clause 5 for Germany and add the following new A-deviation: Clause National deviation		N/A																														
Bibliography y C	<p>Add the following standards:</p> <p>EN 60332-1: 2000, Sound system equipment: Headphones and earphones associated with portable audio equipment – Maximum sound pressure level measurement methodology and limit considerations – Part 1: General method for "one package equipment".</p> <p>PrEN 50332-2 (under consideration), Sound system equipment: Headphones and earphones associated with portable audio equipment – Maximum sound pressure level measurement methodology and limit considerations – Part 2: Guidelines to associate sets with headphones coming from different manufacturers.</p> <p>Add the following notes for the standards indicated:</p> <table border="0"> <tr> <td>IEC 60130</td> <td>NOTE</td> <td>Parts 9 and 17: 1998 are harmonized as ENs (not modified).</td> </tr> <tr> <td>IEC 60139</td> <td>NOTE</td> <td>Partly harmonized in the EN 60169/HD 134 series (not modified).</td> </tr> <tr> <td>IEC 60173</td> <td>NOTE</td> <td>Harmonized as HD 27 S1: 1978 (not modified).</td> </tr> <tr> <td>IEC 60335-2-56</td> <td>NOTE</td> <td>Harmonized as EN 60335-2-56: 1997 (not modified).</td> </tr> <tr> <td>IEC 60335-2-82</td> <td>NOTE</td> <td>Harmonized as EN 60335-2-82: 2000 (not modified).</td> </tr> <tr> <td>IEC 60695</td> <td>NOTE</td> <td>Harmonized as EN 60695 series (not modified).</td> </tr> <tr> <td>IEC 61040</td> <td>NOTE</td> <td>Harmonized as EN 61040: 1992 (not modified).</td> </tr> <tr> <td>IEC 61558-2-1</td> <td>NOTE</td> <td>Harmonized as EN 61558-2-1: 1997 (not modified).</td> </tr> <tr> <td>IEC 61558-2-4</td> <td>NOTE</td> <td>Harmonized as EN 61558-2-4: 1997 (not modified).</td> </tr> <tr> <td>IEC 61558-2-6</td> <td>NOTE</td> <td>Harmonized as EN 61558-2-6: 1997 (not modified).</td> </tr> </table>	IEC 60130	NOTE	Parts 9 and 17: 1998 are harmonized as ENs (not modified).	IEC 60139	NOTE	Partly harmonized in the EN 60169/HD 134 series (not modified).	IEC 60173	NOTE	Harmonized as HD 27 S1: 1978 (not modified).	IEC 60335-2-56	NOTE	Harmonized as EN 60335-2-56: 1997 (not modified).	IEC 60335-2-82	NOTE	Harmonized as EN 60335-2-82: 2000 (not modified).	IEC 60695	NOTE	Harmonized as EN 60695 series (not modified).	IEC 61040	NOTE	Harmonized as EN 61040: 1992 (not modified).	IEC 61558-2-1	NOTE	Harmonized as EN 61558-2-1: 1997 (not modified).	IEC 61558-2-4	NOTE	Harmonized as EN 61558-2-4: 1997 (not modified).	IEC 61558-2-6	NOTE	Harmonized as EN 61558-2-6: 1997 (not modified).	<p>Added.</p> <p>No earphone.</p>	N/A
IEC 60130	NOTE	Parts 9 and 17: 1998 are harmonized as ENs (not modified).																															
IEC 60139	NOTE	Partly harmonized in the EN 60169/HD 134 series (not modified).																															
IEC 60173	NOTE	Harmonized as HD 27 S1: 1978 (not modified).																															
IEC 60335-2-56	NOTE	Harmonized as EN 60335-2-56: 1997 (not modified).																															
IEC 60335-2-82	NOTE	Harmonized as EN 60335-2-82: 2000 (not modified).																															
IEC 60695	NOTE	Harmonized as EN 60695 series (not modified).																															
IEC 61040	NOTE	Harmonized as EN 61040: 1992 (not modified).																															
IEC 61558-2-1	NOTE	Harmonized as EN 61558-2-1: 1997 (not modified).																															
IEC 61558-2-4	NOTE	Harmonized as EN 61558-2-4: 1997 (not modified).																															
IEC 61558-2-6	NOTE	Harmonized as EN 61558-2-6: 1997 (not modified).																															

National Deviation			
Clause	Requirement – Test	Result - Remark	Verdict
Annex ZA	<p>Other international publications quoted in this standard with the references of the relevant European publications</p> <p>This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).</p> <p>NOTE When an international standard has been modified by common modification, indicated by (mod), the relevant EN/HD applies.</p>		P

National Deviation				
Clause	Requirement – Test		Result - Remark	Verdict
-	-	Audio, video and similar electronic apparatus – Routine electrical safety testing in production	EN 50333	2001
EC 60027	series	Letter symbols to be used in electrical technology	HD 245	series
EC 60038 (mod)	1983	IEC standard voltages ¹⁾	HD 472 S1	1989
EC 60068-2-3	1969	Environmental testing	HD 323.3.3 S2 ²⁾	1987
EC 60068-2-6	1995	Part 2: Tests – Test Ca: Damp heat, steady state	EN 60068-2-6	1995
+ corr. March	1995	Part 2: Tests – Test Fc: Vibration (sinusoidal)		
EC 60068-2-32	1975	Part 2: Tests – Test Ed: Free fall	EN 60068-2-32 ³⁾	1993
EC 60068-2-75	1997	Part 2: Tests – Test Eh: Hammer tests	EN 60068-2-75	1997
EC 60095	1984	Thermal evaluation and classification of electrical insulation	HD 566 S1	1990
EC 60107	series	Methods of measurement on receivers for television broadcast transmissions	EN 60107	series
EC 60112	1979	Method for determining the comparative and the proof tracking indices of solid insulating materials under moist conditions	HD 214 S2	1980
EC 60127	series	Miniature fuses	EN 60127	series
EC 60167	1964	Methods of test for the determination of the insulation resistance of solid insulating materials	HD 568 S1	1990
EC 60216	series	Guide for the determination of thermal endurance Properties of electrical insulating materials	HD 611 / EN 60216	series
EC 60227 ⁴⁾	series	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V	HD 21	series
EC 60245 ⁵⁾	series	Rubber insulated cables – Rated voltages up to and including 450/750 V	HD 22	series
EC 60249-2	series	Base materials for printed circuits Part 2: Specifications	EN 60249-2	series
EC 60268-1	1985	Sound system equipment Part 1: General	HD 483.1 S2 ⁶⁾	1989
EC 60317	series	Specifications for particular types of winding wires	EN 60317	series
EC 60320	series	Appliance couplers for household and similar general purposes	EN 60320	series
EC 60335-1 (mod)	2001	Safety of household and similar electrical appliances Part 1: General requirements	EN 60335-1	- ⁷⁾
EC 60384-1	1982	Fixed capacitors for use in electronic equipment Part 1: Generic specification	EN 130000 ⁸⁾	1993
EC 60384-14 4.1	1993 1995	Fixed capacitors for use in electronic equipment Part 14: Sectional specification: Fixed capacitors for electromagnetic interference suppression and connection to the supply mains	EN 132400 ⁹⁾	1994

National Deviation				
Clause	Requirement – Test	Result - Remark	Verdict	
EC 60417	series	Graphical symbols for use on equipment	EN 60417	series
EC 60454	series	Specifications for pressure-sensitive adhesive tapes for electrical purposes	EN 60454	series
EC 60529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529 + corr. May	1991 1993
EC 60664-1 (mod)	1992	Insulation coordination for equipment within low-voltage systems	HD 625.1 S1 + corr. November	1996 1996
EC 60664-3	1992	Part 1: Principles, requirements and tests Part 3: Use of coatings to achieve insulation coordination of printed board assemblies	HD 625.3 S1	1997
EC 60691	1993	Thermal links – Requirements and application guide	EN 60691 ¹⁰⁾	1995
EC 60695-2-2	1991	Fire hazard testing Part 2-2: Test methods – Needle-flame test	EN 60695-2-2	1994
EC 60695-11-10	1999	Part 11-10: Test flames – 50 W horizontal and vertical flame test methods	EN 60695-11-10	1999
EC 60707	1999	Flammability of solid non-metallic materials when exposed to flame sources – List of test methods	EN 60707	1999
EC 60730 (mod)	series	Automatic electrical controls for household and similar use	EN 60730	series
EC 60825-1	1993	Safety of laser products	EN 60825-1	1994
corr. December	1994	Part 1: Equipment classification, requirements and user's guide	+ corr. February	1995
A1	1997		+ A11	1996
A2	2001		+ corr. July	1997
EC 60851-3	1996	Winding wires – Test methods	A2 EN 60851-3	2001 1996
EC 60851-5	1996	Part 3: Mechanical properties	EN 60851-5	1996
EC 60851-6	1996	Part 5: Electrical properties	EN 60851-6	1996
EC 60884	series	Part 6: Thermal properties	-	-
EC 60884	series	Plugs and socket-outlets for household and similar purposes	-	-
EC 60885-1	1987	Electrical test methods for electric cables	-	-
EC 60906	series	Part 1: Electrical tests for cables, cords and wires for voltages up to and including 450/750 V IEC system of plugs and socket-outlets for household and similar purposes	-	-
EC 60950 (mod)	1999	Safety of information technology equipment	EN 60950 ¹¹⁾	2000
- corr. January	2000		+ corr. February	2002
EC 60990	1999	Methods of measurement of touch-current and protective conductor current	EN 60990	1999
EC 60998-2-2	1991	Connecting device for low-voltage circuits for household and similar purposes	EN 60998-2-2	1993
EC 60998-1	1999	Part 2-2: Particular requirements for connecting devices as separate entities with screwless-type clamping units Connecting devices – Safety requirements for screw-type and screwless-type clamping units	EN 60998-1	2000
EC 61032	1997	Part 1: General requirements and particular requirements for clamping units for conductors from 0,2mm ² up to 35 mm ² (included) Protection of persons and equipment by enclosures Probes for verification	EN 61032	1998
EC 61051-2	1991	Varistors for use in electronic equipment	-	-
EC 61058-1	1996	Part 2: Sectional specification for surge suppression varistors Switches for appliances	- ¹²⁾	-
EC/TR2 61149	1995	Part 1: General requirements Guide for safe handling and operation of mobile radio	-	-

National Deviation				
Clause	Requirement – Test		Result - Remark	Verdict
IEC 61260	1995	Electroacoustics – Octave-band and fractional-octave-band filters	EN 61260	1995
IEC 61293	1994	Marking of electrical equipment with ratings related to electrical supply – Safety requirements	EN 61293	1994
IEC 61558-1	1997	Safety of power transformers, power supply units and similar	EN 61558-1	1997
mod: A1	1998	Part 1: General requirements and tests	A1	1998
IEC 61558-2-17	1997	Part 2-17: Particular requirements for transformers for switch mode power supplies	EN 61558-2-17	1997
IEC 61965	2000	Mechanical safety of cathode ray tubes	EN 61965	2001
IEC 82151	2000	Safety of equipment electrically connected to a telecommunication network	-	-
IEC Guide 104	1997	The preparation of safety publications and the use of basic safety publications and group safety publications	-	-
ISO 262	1973	ISO general purpose metric screw threads – Selected sizes for screws, bolts and nuts	-	-
ISO 306	1994	Plastics – Thermoplastic materials- Determination of Vicat softening temperature (VST)	-	-
ISO 7000	1989	Graphical symbols for use on equipment – Index and synopsis	-	-
TJ-T Recommendation K.17	1988	Tests on power-fed repeaters using solid-state devices in order to check the arrangements for protection from external interference	-	-
TJ-T Recommendation K.21	1996	Resistibility of subscriber's terminal to overvoltages and overcurrents	-	-
<p>The title of HD 472 S1 is: Nominal voltages for low voltage public electricity supply systems. 2) HD 323.2.3 S2 includes A1:1984 to IEC 60068-2-3. 3) EN 60068-2-32 includes A2:1990 to IEC 60068-2-32. 4) The HD 21 series is related to but not directly equivalent to the IEC 60227 series. 5) The HD 22 series is related to but not directly equivalent to the IEC 60245 series. 6) HD 483-1 S2 includes A1:1988 to IEC 60268-1. 7) to be published. 8) EN 130000:1993 (which was related to but not directly equivalent to IEC 60384-1:1982) is superseded by EN 60384-1:2001, which is based on IEC 60384-1 1999, mod. 9) EN 132400:1994 is related to but not directly equivalent to IEC 60384-14:1993 + A1:1995. 10) EN 60691 includes A1:1995 to IEC 60691. 11) EN 60950 is superseded by EN 60950-1:2001 (IEC 60950-1:2001, mod.). 12) IEC 61058-1:2000 + A1:2001, mod., are harmonized as EN 61058-1:2002.</p>				

National Deviation			
Clause	Requirement – Test	Result - Remark	Verdict
GROUP DIFFERENCES FOR AMENDMENT 1			P
COMMON MODIFICATIONS			
5.1 i) C	Replace the note by: NOTE For RATED POWER CONSUMPTION measurements of TVs reference is made to EN 62087. Measurements are done in the ON (play) operating mode.	Replaced.	N/A
5.4.1 C	Add the following indent: za) A warning that excessive sound pressure from earphones and headphones can cause hearing loss.	Added. No earphone.	N/A
6.1 C	6.1 Ionizing radiation Equipment that might produce ionizing radiation is checked by measuring the amount of radiation. The amount of radiation is determined by means of a radiation monitor of the ionizing chamber type with an effective area of 1 000 mm ² or by measuring equipment of other types giving equivalent results. Measurements are made with the equipment on test operating at the most unfavourable supply voltage (see 4.2) and with operator controls and service controls adjusted so as to give maximum radiation whilst maintaining the equipment operative for normal use. Internal preset controls not intended to be adjusted during the lifetime of the equipment are not considered to be service controls. At any point 100 mm from the surface of the operator access area, the dose-rate shall not exceed 1 µSv/h (0,1 mR/h) (see Note). Account shall be taken of the background level. NOTE These values appear in Directive 96/29/Euratom.	No ionizing radiation.	N/A

National Deviation			
Clause	Requirement – Test	Result - Remark	Verdict
	<p>Bibliography in EN 60065:2002</p> <p>Replace the paragraph related to prEN 50332-2 by: EN 50332-2:2003, Sound system equipment: Headphones and earphones associated with portable audio equipment - Maximum sound pressure level measurement methodology and limit considerations - Part 2: Matching of sets with headphones if either or both are offered separately EN 60065:2002/A1:2006 - 4 -</p> <p>Bibliography in IEC 60065:2001/A1:2005</p> <p>Add the following notes for the standards indicated:</p> <p>IEC 60598-2-9 NOTE Harmonized as EN 60598-2-9:1989 + A1:1994 (not modified).</p> <p>IEC 60598-2-17 NOTE Harmonized as EN 60598-2-17:1989 + A2:1991 (not modified).</p>		