Shenzhen CTA Testing Technology Co., Ltd.

Room 106, Building 1, Yibaolai Industrial Park, Qiaotou Community, Fuhai Street, Bao'an District, Shenzhen, China

TEST REPORT

Report Reference No...... CTA25041800703

Compiled by

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Supervised by

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Approved by

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Date of issue...... Apr. 28, 2025

Testing Laboratory Name Shenzhen CTA Testing Technology Co., Ltd.

Room 106, Building 1, Yibaolai Industrial Park, Qiaotou Community,

Fuhai Street, Bao'an District, Shenzhen, China

Applicant's name...... Shenzhen Haochuangyi Technology Co.,Ltd

1101, Building 6, Changyi Industrial Plant, No.1 Lirong Road, Xinshi

Community, Dalang Street, Longhua District, Shenzhen, China

Test specification:

ETSI EN 301 489-1 V2.2.3 (2019-11)

ETSI EN 301 489-17 V3.3.1 (2024-09)

Standard EN 55032:2015+A11:2020

EN 55035:2017+A11:2020

EN IEC 61000-3-2:2019/A2:2024

EN 61000-3-3:2013/A2:2021/AC:2022

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Test item description H96Max S905L3

Trade Mark H96 Max

Manufacturer: Shenzhen Haochuangyi Technology Co.,Ltd

Model/Type reference..... H96Max S905L3

List Model: N/A

Hardware version V1.0

Software version.....: V1.0

Ratings...... Input: 12V===1.0A, From AC ADAPTER 100-240V~ 50/60Hz 0.3A

Result...... PASS



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TEST REPORT

Equipment under Test H96Max S905L3

Model /Type H96Max S905L3

Listed Models N/A

CTATESTING Shenzhen Haochuangyi Technology Co.,Ltd **Applicant**

1101, Building 6, Changyi Industrial Plant, No.1 Lirong Road, Xinshi Address

> Community, Dalang Street, Longhua District, Shenzhen, China CTATESTING

Shenzhen Haochuangyi Technology Co.,Ltd Manufacturer

Address 1101, Building 6, Changyi Industrial Plant, No.1 Lirong Road, Xinshi

Address	, , , , , ,	et, Longhua District, Shenzhen, China
CTATES!	TESTING	
Test Result	C/L	PASS

The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory. CTA TESTING

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1. TEST STANDARDS

The tests were performed according to following standards:

ETSI EN 301 489-1 V2.2.3 (2019-11)—ElectroMagnetic Compatibility (EMC) tandard for radio equipment and services; Part 1: Common technical requirements; Harmonised Standard for ElectroMagnetic Compatibility ETSI EN 301 489-17 V3.3.1 (2024-09)—ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for Broadband Data Transmission Systems; Harmonised Standard for ElectroMagnetic Compatibility

EN 55032:2015+A11:2020- Electromagnetic compatibility of multimedia equipment - Emission Requirements EN 55035:2017+A11:2020- Electromagnetic compatibility of multimedia equipment - Immunity requirements EN IEC 61000-3-2:2019/A2:2024-Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤16 A per phase)

EN 61000-3-3:2013/A2:2021/AC:2022- Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤16 A per phase and not subject to conditional connection

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2. SUMMARY

2.1. General Remarks

Date of receipt of test sample	:	Apr. 18, 2025	
CVI.		- TES.	, Ca
Testing commenced on		Apr. 18, 2025	STING
	C		TATES
Testing concluded on		Apr. 28, 2025	CI
2.2. Product Description			

2.2. Product Description

		-TA
Testing co	oncluded on	: Apr. 28, 2025
2.2. Pro	oduct Description	
Product N	lame:	H96Max S905L3
Model/Typ	pe reference:	H96Max S905L3
Power su	pply:	Input: 12V===1.0A, From AC ADAPTER
Adapter in	nformation	Model: MR-FA0171200100EU Input: AC 100-240V 50/60Hz 0.3A Output: DC 12.0V 1.0A
BR/EDR		(50)
Operation	n frequency	2402MHz-2480MHz
BT Modul	lation Type	GFSK, π/4DQPSK, 8DPSK
Bluetooth		Supported BR+EDR
Channel r	number:	79
2.4G WIF	L TEST	
WLAN		Supported 802.11b/802.11g/802.11n HT20/802.11n HT40
WLAN CE	Operation frequency	IEEE 802.11b:2412-2472MHz
		IEEE 802.11g:2412-2472MHz
	<i>y</i>	IEEE 802.11n HT20:2412-2472MHz
	l	IEEE 802.11n HT40:2422-2462MHz
WLAN CE	Modulation Type	IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK)
ING	l	IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK)
TESTIN	l	IEEE 802.11n HT20: OFDM (64QAM, 16QAM, QPSK,BPSK)
ATESTING	l	IEEE 802.11n HT40: OFDM (64QAM, 16QAM, QPSK,BPSK)
	number:	13

2.3. EUT operation mode

Channel nun	nber:	13			-1G		
2.3. EUT	operation n	node					
Test mode	WIFI	ВТ	LAN	USB	AV	ндмі	Adapter
1							
2							
3	-NG						
4	ESTIT		•				

Note:

- 1. is operation mode.
- CTATESTING 2. Note: We tested all Modes and recorded the worst case as follow:



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Test item	Test mode (Worse case mode)
Conducted emission(AC MAIN)	Mode 1
Conducted emission (Network)	Mode 2
Radiated emission	Mode 1
EMS	Mode 1
CTATES CTATES	
2.4. EUT configuration	STATE

2.4. EUT configuration

CTATE The following peripheral devices and interface cables were connected during the measurement:

- supplied by the manufacturer
- O supplied by the lab

	O - supplied by the lab			
CTATE	O Color display	Model	F27T350FHC	
	○ Keyboard	Model	K120	
,	O Mouse	Model	MS116T1]
	6.0	_4	ATES	J
	2.5. Modifications	CIN C		
G	No modifications were implemented to meet	testing criteria.		

2.5. Modifications

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3. TEST ENVIRONMENT

3.1. Address of the test laboratory

Shenzhen CTA Testing Technology Co., Ltd. Room 106, Building 1, Yibaolai Industrial Park, Qiaotou Community, Fuhai Street, Bao'an District, Shenzhen, China

3.2. Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

FCC-Registration No.: 517856 Designation Number: CN1318

Shenzhen CTA Testing Technology Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

A2LA-Lab Cert. No.: 6534.01

Shenzhen CTA Testing Technology Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement

The 3m-Semi anechoic test site fulfils CISPR 16-1-4 according to ANSI C63.10 and CISPR 16-1-4:2010.

3.3. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Normal Temperature:	25°C
Lative Humidity	55 %
Air Pressure	989 hPa

3.4. Test Description

4. Test Description				
Emission Measurement			D. 400	
Radiated Emission	ETSI EN 301 489-1 V2.2.3 (2019-11)			
	ETSI EN 301 489-17 V3.3.1 (2024-09)		PASS	
ETIM	EN 55032:2015+A11:2020			
Conducted Emission(AC Mains)	ETSI EN 301 489-1 V2.2.3 (2019-11)			
CTA	ETSI EN 301 489-17 V3.3.1 (2024-09)		PASS	
	EN 55032:2015+A11:2020			
Harmonic Current Emissions	ETSI EN 301 489-1 V2.2.3 (2019-11)			
	ETSI EN 301 489-17 V3.3.1 (2024-09)		N/A	
	EN IEC 61000-3-2:2019/A2:2024		-ATE	
Voltage Fluctuations and Flicker	ETSI EN 301 489-1 V2.2.3 (2019-11)	C	115	
3.3	ETSI EN 301 489-17 V3.3.1 (2024-09)	CVID	N/A	
	EN 61000-3-3:2013/A2:2021/AC:2022	May Manager		
Immunity Measurement				
Electrostatic Discharge	ETSI EN 301 489-1 V2.2.3 (2019-11)			
-ESI	ETSI EN 301 489-17 V3.3.1 (2024-09)		PASS	
TATL	EN 55035:2017+A11:2020		ı	
RF Electromagnetic Field	ETSI EN 301 489-1 V2.2.3 (2019-11)			
7	ETSI EN 301 489-17 V3.3.1 (2024-09)		PASS	
	EN 55035:2017+A11:2020	TING	ı	
Fast Transients Common Mode	ETSI EN 301 489-1 V2.2.3 (2019-11)	69,		
	ETSI EN 301 489-17 V3.3.1 (2024-09)		PASS	
	EN 55035:2017+A11:2020		ı	
RF Common Mode 0,15 MHz to 80	ETSI EN 301 489-1 V2.2.3 (2019-11)			
MHz	ETSI EN 301 489-17 V3.3.1 (2024-09)		PASS	E CIL
	EN 55035:2017+A11:2020			

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Voltage Dips and Interruptions	ETSI EN 301 489-1 V2.2.3 (2019-11) ETSI EN 301 489-17 V3.3.1 (2024-09)	No. 103 October 1	PASS
ING	EN 55035:2017+A11:2020		
Surges	ETSI EN 301 489-1 V2.2.3 (2019-11)		
TATES	ETSI EN 301 489-17 V3.3.1 (2024-09)		PASS
E G\n	EN 55035:2017+A11:2020		

Remark:1. N/A means "not applicable".

2. The measurement uncertainty is not included in the test result.

3.5. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01" Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 1" and TR-100028-02 "Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 2 " and is documented in the Shenzhen CTA Testing Technology Co., Ltd. quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Shenzhen CTA Testing Technology Co., Ltd.:

Test	Range	Measurement Uncertainty	Notes
Radiated Emission	9KHz~30MHz	3.02 dB	(1)
Radiated Emission	30~1000MHz	4.06 dB	(1)
Radiated Emission	1~18GHz	5.14 dB	(1)
Radiated Emission	18-40GHz	5.38 dB	(1)
Conducted Disturbance	0.15~30MHz	2.14 dB	(1)
Output Peak power	30MHz~18GHz	0.55 dB	(1)
Power spectral density	1	0.57 dB	(1)
Spectrum bandwidth	71119	1.1%	(1)
Radiated spurious emission (30MHz-1GHz)	30~1000MHz	4.10 dB	(1)
Radiated spurious emission (1GHz-18GHz)	1~18GHz	4.32 dB	(1)
Radiated spurious emission (18GHz-40GHz)	18-40GHz	5.54 dB	(1)

⁽¹⁾ This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

3.6. Equipments Used during the Test

Item	Test Equipment	Manufacturer	Model No.	Equipment No.	Last Cal.	Cal.Due
1	EMI Test Receiver	R&S	ESPI	CTA-307	2024/08/03	2025/08/02
2	Artificial Mains	R&S	ENV-216	CTA-308	2024/08/03	2025/08/02
3	Artificial Mains	R&S	ENV-216	CTA-314	2024/08/03	2025/08/02
4	ISN	Schwarzbeck	NTFM8158	CTA-407	2024/08/03	2025/08/02
5	ISN	Schwarzbeck	CAT58158	CTA-408	2024/08/03	2025/08/02
6	ISN	Schwarzbeck	CAT38158	CTA-409	2024/08/03	2025/08/02
7	Universal Radio Communication	R&S	CMW500	CTA-302	2024/08/03	2025/08/02
8	EMI Test Software	Tonscend	TS®JS32-CE	N/A	N/A	N/A
ESTIN	G					

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На	Harmonic Current/ Voltage Fluctuation and Flicker									
Ite	em	Test Equipment	Manufacturer	Model No.	Equipment No.	Last Cal.	Cal.Due			
	1	Harmonic and Flicker Analyzer	Voltech	PM6000	CTA-339	2024/08/03	2025/08/02			
	2	Universal Radio Communication	R&S	CMW500	CTA-302	2024/08/03	2025/08/02			

Ele	Electrostatic Discharge										
Iter	n Test Equipment	Manufacturer	Model No.	Equipment No.	Last Cal.	Cal.Due					
EST	ESD Simulators	NOISEKEN	ESS-100L(A)	CTA-315	2024/08/03	2025/08/02					
2	Universal Radio Communication	R&S	CMW500	CTA-302	2024/08/03	2025/08/02					

Radia	ted Emission					
Item	Test Equipment	Manufacturer	Model No.	Equipment No.	Last Cal.	Cal.Due
1	Ultra-Broadband Antenna	Schwarzbeck	VULB9163	CTA-310	2023/10/17	2026/10/16
2	EMI Test Receiver	ROHDE & SCHWARZ	ESCI	CTA-306	2024/08/03	2025/08/02
3	Horn Antenna	Schwarzbeck	BBHA 9120D	CTA-309	2023/10/13	2026/10/12
4	Universal Radio Communication	CMW500	R&S	CTA-302	2024/08/03	2025/08/02
5	Band-reject filter	Xi'an Xingbo Technology Co.,Ltd	XBLBQ-DZA66	CTA-410	2024/08/03	2025/08/02
6	Band-reject filter	Xi'an Xingbo Technology Co.,Ltd	XBLBQ-DZA64	CTA-411	2024/08/03	2025/08/02
7	Band-reject filter	Xi'an Xingbo Technology Co.,Ltd	XBLBQ-DZA63	CTA-411	2024/08/03	2025/08/02
8	High-pass filter	Xi'an Xingbo Technology Co.,Ltd	XBLBQ-GTA10	CTA-412	2024/08/03	2025/08/02
9	High-pass filter	Xi'an Xingbo Technology Co.,Ltd	XBLBQ-GTA18	CTA-402	2024/08/03	2025/08/02
10	EMI Test Software	Tonscend	TS®JS32-RE	N/A	N/A	N/A
	CTATE		:MG			

ATA			-AIG				
Electric	al Fast Transient						
Item	Test Equipment	Manufacturer	Model No.	Equipment No.	Last Cal.	Cal.Due	
1	Fast Transient Burst Simulator	Prima	EFT61004TA	CTA-316	2024/08/03	2025/08/02	
2	Coupling Clamp	Prima	EFT-CLAMP	CTA-317	2024/08/03	2025/08/02	
-iN	G					CALL	

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3	Universal Radio Communication	R&S	CMW500	CTA-302	2024/08/03	2025/08/02
	Communication					

	JING)				
Surge						
Item	Test Equipment	Manufacturer	Model No.	Equipment No.	Last Cal.	Cal.Due
1	Lightning Surge Generator	Prima	SUG61005TB	CTA-318	2024/08/03	2025/08/02
2	Lightning Surge Generator	Prima	SUG10/700TA	CTA-319	2024/08/03	2025/08/02
3	Universal Radio Communication	R&S	CMW500	CTA-302	2024/08/03	2025/08/02

	1	G					T.
1	Dips						
CTA'	Item	Test Equipment	Manufacturer	Model No.	Equipment No.	Last Cal.	Cal.Due
7	1	Cycle Sag Simulator	Prima	DRP61011TA	CTA-321	2024/08/03	2025/08/02
	2	Universal Radio Communication	R&S	CMW500	CTA-302	2024/08/03	2025/08/02

	Communication					-61111	
			CAL		_	LES.	
RF Fiel	d Strength Suscepti	bility					
Item	Test Equipment	Manufacturer	Model No.	Equipment No.	Last Cal.	Cal.Due	
1	SIGNAL GENERATOR	Agilent	N5182A	CTA-305	2024/08/03	2025/08/02	
2	POWER AMPLIFIER	AR	150W1000	CTA-413	2024/08/03	2025/08/02	
3	POWER AMPLIFIER	Mictop	MPA-1000- 6000-100	CTA-414	2024/08/03	2025/08/02	
4	DUAL DIRECTIONAL COUPLER	AR	DC6080	CTA-415	2024/08/03	2025/08/02	
5	POWER METER	Agilent	E4419B	CTA-416	2024/08/03	2025/08/02	
6	Power sensor	Agilent	E9301A	CTA-417	2024/08/03	2025/08/02	
7	Power sensor	Agilent	8483A	CTA-418	2024/08/03	2025/08/02	
8	TRANSMITTING ANTENNA	AR	AT1080	CTA-419	2023/10/17	2026/10/16	
9	TRANSMITTING ANTENNA	Schwarzbeck	STLP 9149	CTA-420	2023/10/17	2026/10/16	
10	Radio Communication Tester	R&S	CMW500	CTA-302	2024/08/03	2025/08/02	
11	Audio Analyzer	R&S	UPL	CTA-421	2024/08/03	2025/08/02	
ING							

Item	Test Equipment	Manufacturer	Model No.	Equipment No.	Last Cal.	Cal.Due
	CS Test system	Schloder	CDG 6000-75	CTA-322	2024/08/03	2025/08/0
2	CDN M2+M3	Zhinan	ZN3750	CTA-323	2024/08/03	2025/08/0
3	6dB Attenuator	Schloder	CDG60100	CTA-324	2024/08/03	2025/08/0
4	EM Clamp	Schloder	EMCL-20	CTA-325	2024/08/03	2025/08/

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5	Audio Analyzer	R&S	UPL	CTA-421	2024/08/03	2025/08/02
6	Universal Radio Communication	R&S	CMW500	CTA-302	2024/08/03	2025/08/02

Test Equipment	Manufacturer	Model No.	Version number	Calibration Date	Calibration Due Date
EMI Test Software	Tonscend	TS®JS32-RE	5.0.0.2	N/A	N/A
EMI Test Software	Tonscend	TS®JS32-CE	5.0.0.1	N/A	N/A
RF Test Software	Tonscend	TS®JS1120-3	3.1.65	N/A	N/A
RF Test Software	Tonscend	TS®JS1120	3.1.46	N/A	N/A

For CONDUCTED EMISSION for network port

Conduc	cted Disturbance				
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	ETVT Test Receiver	ROHDE & SCHWARZ	ESCI	100900	2024/08/03
3	Foue Balanced Telecom Pair ISN	FCC	FCC-TLISN-T8- 02	20375	2024/08/03

Electrical Fast Transient/Burst											
Item	ttem Test Equipment Manufacturer Model No. Serial No. Last Cal.										
1	Ultra Compact Simulator	EM TEST	UCS500M6	0500-19	2024/08/03						
2	2 Coupling Clamp EM TEST HFK 1501-14 2024/08/03										
	(EI)										

	Surge		9	C	(P)	
	Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
	1	ULTRA COMPACT SIMULATOR	EM TEST	UCS500M6	0500-19	2024/08/03
- 1	2	Surger Generator	EM TEST	TSS500M4	1100-04	2024/08/03
CTAT	3-Phase Coupling Network		EM TEST	CNV503S5/16A	1200-04	2024/08/03
				CTATESTIN		CTATESTING
G						



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4. TEST CONDITIONS AND RESULTS

4.1. EMISSION

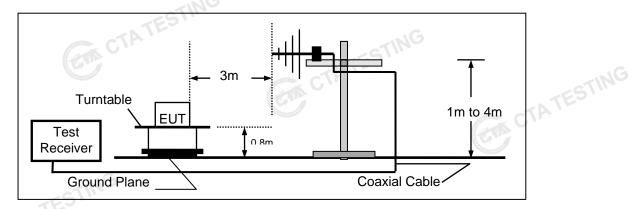
4.1.1. Radiated Emission

LIMIT

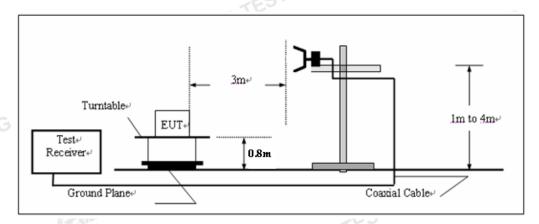
Please refer to ETSI EN301489-1 Clause 8.2.3, Table 4 and EN55032 Annex A, Table A.2, A.3, and Class B

TEST CONFIGURATION

a) Radiated emission test set-up, frequency below 1000MHz:



b) Radiated emission test set-up, frequency above 1000MHz



TEST PROCEDURE

Please refer to ETSI EN 301 489-1 Clause 8.2.3 and EN55032 Annex A for the measurement methods

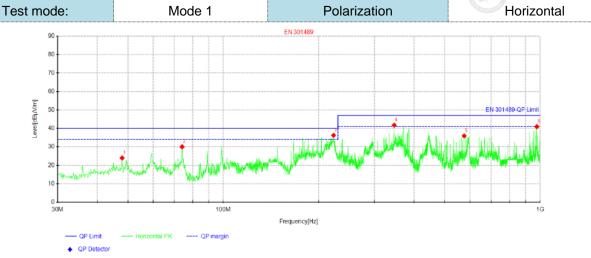
TEST RESULTS

Passed

Please refer to the below test data:

Note: While performing the testing, the notch filter is used for avoiding test instrument overload.

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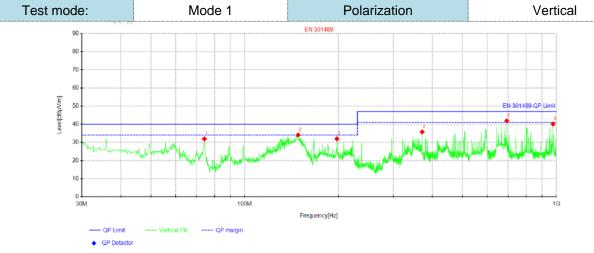
CTATE

		30M			100M					1G			
						Frequency[Hz]							
		_	— QP Limit —— Ho	rizontal PK QP	margin								
_175		◆ QP Detector											
CTATE	Suspe	Suspected Data List											
1	NO.	Freq.	Reading	Level	Factor	Limit	Margin	Height	Angle	Polarity			
	140.	[MHz]	[dBµ∨]	[dBµV/m]	[dB/m]	[dBµV/m]	[dB]	[cm]	[°]	Folality			
	1	47.945	35.28	24.01	-11.27	40.00	15.99	100	358	Horizontal			
	2	74.135	45.88	30.04	-15.84	40.00	9.96	200	183	Horizontal			
	3	222.787	48.76	36.29	-12.47	40.00	3.71	100	253	Horizontal			
	4	346.341	52.53	41.80	-10.73	47.00	5.20	100	241	Horizontal			
G	5	575.503	43.26	35.96	-7.30	47.00	11.04	200	355	Horizontal			
	6	976.235	42.86	40.98	-1.88	47.00	6.02	100	171	Horizontal			

CTATESTING

Note:1).Level (dBµV/m)= Reading (dBµV/m)+ Factor (dB/m)

- 2). Factor(dB/m)=Antenna Factor (dB/m) + Cable loss (dB) Pre Amplifier gain (dB)
- 3). $Margin(dB) = Limit (dB\mu V/m) Level (dB\mu V/m)$



CTATE

Susp	ected Data	List							
NO.	Freq.	Reading	Level	Factor	Limit	Margin	Height	Angle	Delevity
NO.	[MHz]	[dBµ∨]	[dBµV/m]	[dB/m]	[dBµV/m]	[dB]	[cm]	[°]	Polarity
1	74.2562	47.83	31.96	-15.87	40.00	8.04	100	95	Vertical
2	148.461	49.51	34.07	-15.44	40.00	5.93	200	71	Vertical
3	197.688	44.99	32.00	-12.99	40.00	8.00	100	303	Vertical
4	371.076	46.31	35.78	-10.53	47.00	11.22	100	279	Vertical
5	693.237	47.08	41.91	-5.17	47.00	5.09	200	107	Vertical
6	975.871	42.07	40.19	-1.88	47.00	6.81	100	129	Vertical

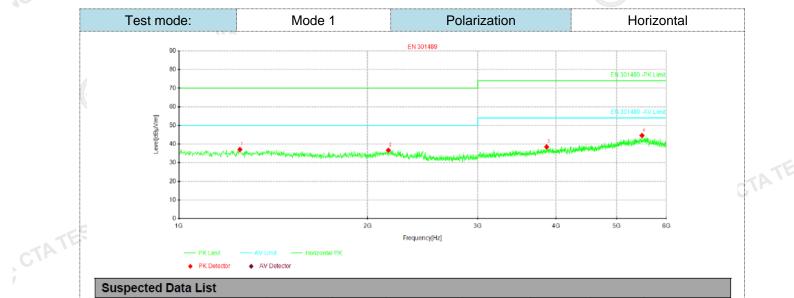
CTA TESTING

Note:1).Level ($dB\mu V/m$)= Reading ($dB\mu V/m$)+ Factor (dB/m)

2). Factor(dB/m)=Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB)

3). Margin(dB) = Limit (dB μ V/m) - Level (dB μ V/m)

CTATE



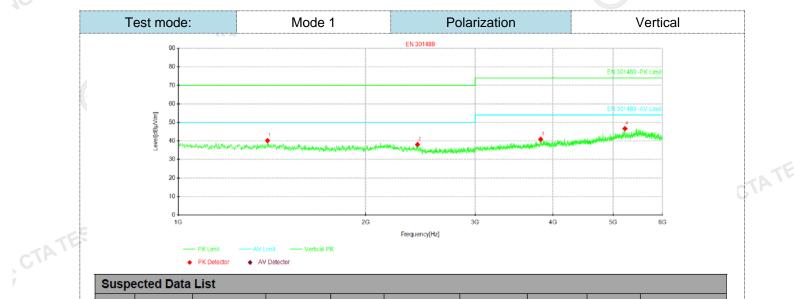
Suspe	Suspected Data List										
NO.	Freq.	Reading	Level	Factor	Limit	Margin	Height	Angle	Polarity		
	[MHz]	[dBµV]	[dBµV/m]	[dB/m]	[dBµV/m]	[dB]	[cm]	[°]	, , , , , ,		
1	1251.25	60.74	37.13	-23.61	70.00	32.87	100	130	Horizontal		
2	2160	58.83	36.74	-22.09	70.00	33.26	100	130	Horizontal		
3	3863.75	57.73	38.53	-19.20	74.00	35.47	100	320	Horizontal		
4	5487.5	58.99	44.63	-14.36	74.00	29.37	100	60	Horizontal		

GTA TESTING

Note:1).Level ($dB\mu V/m$)= Reading ($dB\mu V/m$)+ Factor (dB/m)

- 2). Factor(dB/m)=Antenna Factor (dB/m) + Cable loss (dB) Pre Amplifier gain (dB)
- 3). $Margin(dB) = Limit (dB\mu V/m) Level (dB\mu V/m)$

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Suspe	ected Data	List							
NO	Freq.	Reading	Level	Factor	Limit	Margin	Height	Angle	Delevity
NO.	[MHz]	[dBµV]	[dBµV/m]	[dB/m]	[dBµV/m]	[dB]	[cm]	[°]	Polarity
1	1391.25	63.09	40.19	-22.90	70.00	29.81	100	120	Vertical
2	2423.75	59.38	38.12	-21.26	70.00	31.88	100	180	Vertical
3	3823.75	60.19	40.91	-19.28	74.00	33.09	100	340	Vertical
4	5222.5	62.02	46.69	-15.33	74.00	27.31	100	330	Vertical

CTA TESTING

Note:1).Level (dBµV/m)= Reading (dBµV/m)+ Factor (dB/m)

- 2). Factor(dB/m)=Antenna Factor (dB/m) + Cable loss (dB) Pre Amplifier gain (dB)
- 3). Margin(dB) = Limit (dBμV/m) Level (dBμV/m)

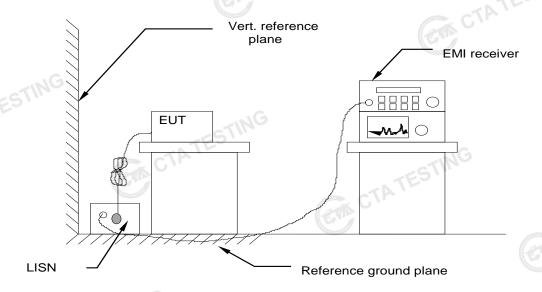
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4.1.2. Conducted Emission

LIMIT

Please refer to ETSI EN301489-1 Clause 8.4.3, Table 8 and EN55032 Annex A, Table A.10, A.12

TEST CONFIGURATION



TEST PROCEDURE

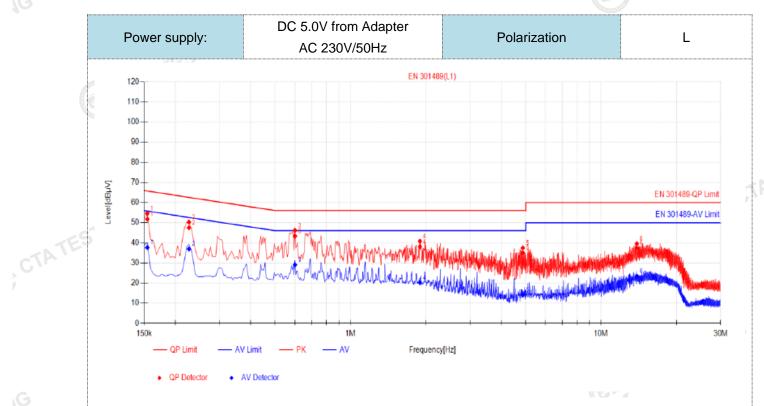
Please refer to ETSI EN 301 489-1 Clause 8.4.3 and EN55032 Annex A for the measurement methods. CTA TESTING

TEST RESULTS

Passed

Please refer to the below test data:

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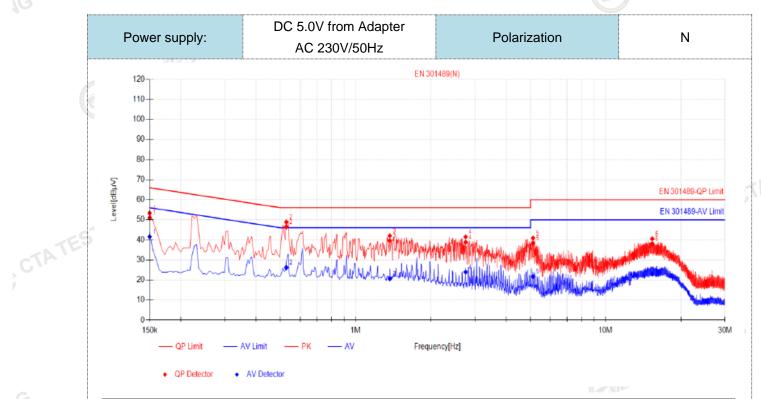


NO.	Freq. [MHz]	Factor [dB]	QP Reading[dB μV]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Reading [dBμV]	ΑV Value [dBμV]	AV Limit [dΒμV]	AV Margin [dB]	Verdict
1	0.1545	9.89	41.89	51.78	65.75	13.97	27.74	37.63	55.75	18.12	PASS
2	0.2265	10.01	37.50	47.51	62.58	15.07	26.93	36.94	52.58	15.64	PASS
3	0.6	10.04	33.31	43.35	56.00	12.65	19.02	29.06	46.00	16.94	PASS
4	1.8915	9.92	28.14	38.06	56.00	17.94	10.29	20.21	46.00	25.79	PASS
5	4.875	9.98	25.10	35.08	56.00	20.92	4.04	14.02	46.00	31.98	PASS
6	13.893	10.30	27.13	37.43	60.00	22.57	13.06	23.36	50.00	26.64	PASS
6 13.893 10.30 27.13 37.43 60.00 22.57 13.06 23.36 50.00 26.64 PASS Note:1).Level (dBµV)= Reading (dBµV)+ Factor (dB) 2). Factor (dB)=insertion loss of LISN (dB) + Cable loss (dB)											

- 2). Factor (dB)=insertion loss of LISN (dB) + Cable loss (dB)
 - 3). Margin(dB) = Limit (dB μ V) Level (dB μ V) .,-L



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	Fina	l Data Lis	it										
	NO.	Freq. [MHz]	Factor [dB]	QP Reading[dB μV]	QP Value [dBµV]	QP Limit [dΒμV]	QP Margin [dB]	AV Reading [dBμV]	ΑV Value [dBμV]	ΑV Limit [dBμV]	AV Margin [dB]	Verdict	
	1	0.15	9.98	40.98	50.96	66.00	15.04	31.59	41.57	56.00	14.43	PASS	
	2	0.528	10.05	36.46	46.51	56.00	9.49	16.14	26.19	46.00	19.81	PASS	
	3	1.3695	10.15	29.49	39.64	56.00	16.36	10.40	20.55	46.00	25.45	PASS	
	4	2.751	10.18	28.62	38.80	56.00	17.20	13.78	23.96	46.00	22.04	PASS	
	5	5.1225	10.10	28.21	38.31	60.00	21.69	11.60	21.70	50.00	28.30	PASS	
	6	15.351	10.43	27.64	38.07	60.00	21.93	12.63	23.06	50.00	26.94	PASS	
Note:1).Level (dBµV)= Reading (dBµV)+ Factor (dB) 2). Factor (dB)=insertion loss of LISN (dB) + Cable loss (dB)											TATE		
2). Factor (dB)=insertion loss of LISN (dB) + Cable loss (dB)													
[]	3).	Margin(dE	3) = Limi	t (dBµV)	- Level (dΒμV)						23 10000	

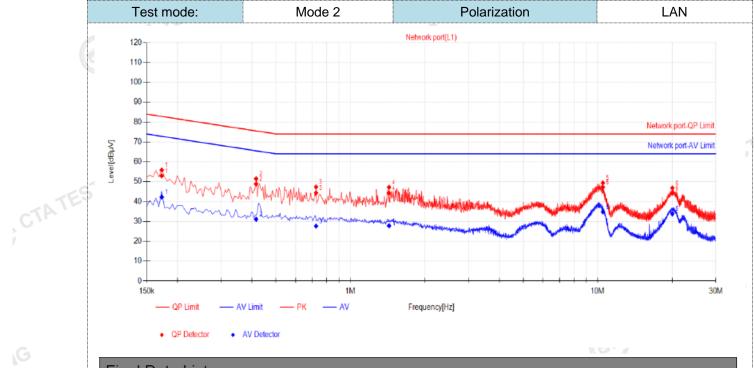
- 2). Factor (dB)=insertion loss of LISN (dB) + Cable loss (dB)
- 3). Margin(dB) = Limit (dB μ V) Level (dB μ V) CTATESTING



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For network port

CTATESTING



	Final Data List												
	NO.	Freq. [MHz]	Factor [dB]	QP Reading[dB μV]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Reading [dBμV]	AV Value [dΒμV]	AV Limit [dBµV]	AV Margin [dB]	Verdict	
	1	0.1725	9.97	42.93	52.90	82.84	29.94	32.27	42.24	72.84	30.60	PASS	
	2	0.4155	9.89	38.94	48.83	75.54	26.71	21.21	31.10	65.54	34.44	PASS	
N	3	0.726	9.92	34.46	44.38	74.00	29.62	17.68	27.60	64.00	36.40	PASS	
	4	1.4325	9.90	34.33	44.23	74.00	29.77	17.87	27.77	64.00	36.23	PASS	
	5	10.4865	10.26	36.98	47.24	74.00	26.76	24.53	34.79	64.00	29.21	PASS	
	6	20.013	10.43	33.79	44.22	74.00	29.78	23.37	33.80	64.00	30.20	PASS	

CTA TESTING

CTA .

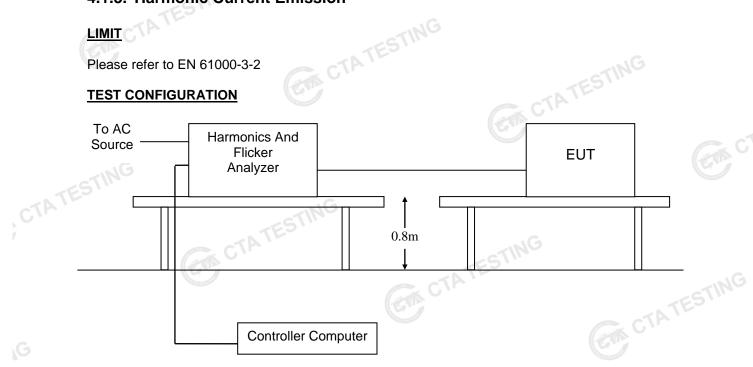
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4.1.3. Harmonic Current Emission

LIMIT

Please refer to EN 61000-3-2

TEST CONFIGURATION



TEST PROCEDURE

Please refer to EN 61000-3-2 for the measurement methods.

TEST RESULTS

The power of this product is less than 75W, So this test item is not applicable for the EUT.

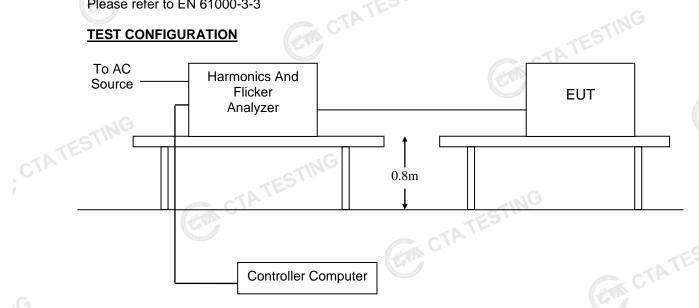
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4.1.4. Voltage Fluctuation and Flicker

LIMIT

Please refer to EN 61000-3-3

TEST CONFIGURATION



TEST PROCEDURE

Please refer to EN 61000-3-3 for the measurement methods.

TEST RESULTS

The maximum input power of the EUT is less than 20W, which unlikely to produce significant voltage fluctuation. Therefore this test item is not applicable for the EUT.

See clause 6.1*** *** EN 61000-3-3, clause 6.1: " ... Tests need not be made on equipment which is CTATESTING unlikely to produce significant voltage fluctuations or flicker. ... "



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4.2. IMMUNITY

4.2.1. Performance criteria

■ ETSI EN301489-1

General performance criteria

- performance criterion A applies for immunity tests with phenomena of a continuous nature;
- performance criterion B applies for immunity tests with phenomena of a transient nature.
- •The equipment shall meet the minimum performance criteria as specified in the following.

Criteria	During test	After test
Α	Operate as intended	Operate as intended
	No loss of function	No loss of function
	No unintentional responses	No degradation of performance
		No loss of stored data or user programmable functions
В	May show loss of function	Operate as intended
	No unintentional responses	Lost function(s) shall be self-recoverable
		No degradation of performance
	TESTING	No loss of stored data or user programmable functions

NOTE: Where "operate as intended" or "no loss of function" is specified, the EUT shall demonstrate correct functioning as described in clause 5.

CTATES:

■ ETSI EN301489-17

General performance criteria

- Performance criteria A for immunity tests with phenomena of a continuous nature;
- Performance criteria B for immunity tests with phenomena of a transient nature;
- Performance criteria C for immunity tests with power interruptions exceeding a certain time.

The equipment shall meet the minimum performance criteria as specified in the following.

Criteria	During test	After test					
Α	Shall operate as intended. (See note).	Shall operate as intended.					
	Shall be no loss of function.	Shall be no degradation of performance.					
	Shall be no unintentional transmissions.	Shall be no loss of function.					
	G	Shall be no loss of critical stored data.					
В	May be loss of function.	Functions shall be self-recoverable.					
CTA	11/2	Shall operate as intended after recovering.					
CVA	TESTIN	Shall be no loss of critical stored data.					
С	May be loss of function.	Functions shall be recoverable by the operator. Shall operate as intended after recovering.					
		Shall be no loss of critical stored data.					
NOTE: Ope	NOTE: Operate as intended during the test allows a level of degradation in accordance with clause 6.2.2.						

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For equipment that supports a PER or FER, the minimum performance level shall be a PER or FER less than or equal to 10 %.

For equipment that does not support a PER or a FER, the minimum performance level shall be no loss of the wireless transmission function needed for the intended use of the equipment.

Performance criteria for Continuous phenomena

The performance criteria A shall apply.

Where the EUT is a transmitter in standby mode, unintentional transmission shall not occur during the test.

Where the EUT is a transceiver in receive mode, unintentional transmission shall not occur during the test.

Performance criteria for Transient phenomena

The performance criteria B shall apply, except for voltage dips greater than or equal to 100 ms and voltage interruptions of 5 000 ms duration, for which performance criteria C shall apply.

Where the EUT is a transmitter in standby mode, unintentional transmission shall not occur as a result of the application of the test.

Where the EUT is a transceiver in receive mode, unintentional transmission shall not occur as a result of the application of the test.

■ Performance Criterion of EN55035

Criterion A: The equipment shall continue to operate as intended without operator intervention. No degradation of performance of loss of function is allowed below a performance level specified by the manufacturer when the equipment is used as intended.

Criterion B: After the test, the equipment shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed, after the application of the phenomena below a performance level specified by the manufacturer, when the equipment is used as intended.

Criterion C: Loss of function is allowed, provided the function is self-recoverable, or can be restored by the operation of the controls by the user in accordance with the manufacturer's instructions.

4.2.2. Monitoring EUT in Immunity Test

4.2.2.1 Monitoring for Continuous Phenomena Applied to the EUT

■ WIFI Mode

At the start of the test, establish a wireless link between the EUT and CMW500(integrate WIFI protocol Analyzer);

During the test, observe whether the EUT operate as intended, no loss of function and no unintentional transmissions. Monitoring PER and shall exeed 10%

After the test, Check the function and critical stored data of the EUT with no degration.

In addition, when EUT working in Idle /Receiver mode, monitor whether the transmitter unintentionally operates.

■ other Mode

During and after the test, observe the Screen status by eyes or monitor to see whether there is degration of performance

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4.2.2.2 Monitoring for Transient Phenomena Applied to the EUT

■ WIFI Mode

At the start of the test, establish a wireless link between the EUT and CMW500(integrate WIFI protocol Analyzer);

After the test, Check the function and critical stored data of the EUT with no degration.

In addition, when EUT working in Idle /Receiver mode, monitor whether the transmitter unintentionally operates.

other Mode

After the test, observe the Screen status by eyes or monitor to see whether there is degration of performance

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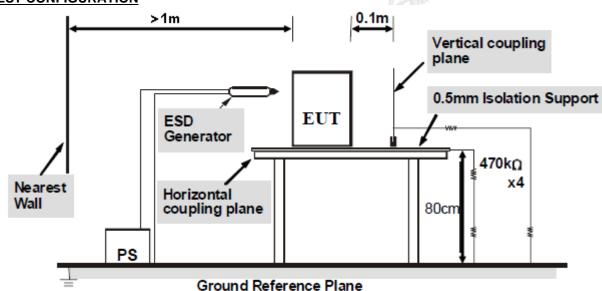
4.2.3. Electrostatic Discharge

LIMIT

SEVERITY LEVELS OF ELECTROSTATIC DISCHARGE

Test level: Contact Discharge at ±2KV, ±4KV Air Discharge at ±2KV, ±4KV, ±8KV

TEST CONFIGURATION



TEST PROCEDURE

Please refer to ETSI EN 301 489-1 Clause 9.3.2, EN 55035 and EN 61000-4-2 for the measurement methods.

Contact Discharge:

The ESD generator is held perpendicular to the surface to which the discharge is applied and the tip of the discharge electrode touch the surface of EUT. Then turn the discharge switch. The generator is then retriggered for a new single discharge and repeated at least 10 times for each pre-selected test point. This procedure shall be repeated until all the air discharge completed.

Air Discharge:

Air discharge is used where contact discharge can't be applied. The round discharge tip of the discharge electrode shall be approached as fast as possible to touch the EUT. After each discharge, the discharge electrode shall be removed from the EUT. The generator is then re-triggered for a new single discharge and repeated at least 10 times for each pre-selected test point. This procedure shall be repeated until all the air discharge completed.

Indirect discharge for horizontal coupling plane:

At least 10 single discharges shall be applied to the horizontal coupling plane, at points on each side of the EUT.

Indirect discharge for vertical coupling plane:

At least 10 single discharges shall be applied to the center of one vertical edge of the coupling plane. The coupling plane, of dimensions 0.5m X 0.5m, is placed parallel to, and positioned at a distance of 0.1m from the EUT. Discharges shall be applied to the coupling plane, with this plane in sufficient different positions that the four faces of the EUT are completely illuminated.

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Please reference to the section 2.3

TEST RESULTS

	Direct discharge									
	Type of discharge	Discharge voltage (KV)	Observations Performance	Criteria Level	Result					
	Contact discharge	± 2	No degradation in performance of the EUT was observed (A)	TATE						
		± 4	Α	В	Pass					
	NG.	±2	A	В	1 433					
	Air discharge	±4	A	В	25 000					
CTATE		±8NG	A	В						
1	Indirect discharge									
	Type of discharge	Discharge voltage (KV)	Observations Performance	Criteria Level	Result					
	HCD (6 sides)	±2	A	В	TING					
	HCP (6 sides)	± 4	A	В	TESIN					
	\/CD (4 sides)	±2	Α	В	Pass					
	VCP (4 sides)	±4	A	В						

Remark: The ancillary equipment's specification for an acceptable level of performance or degradation of performance during and/or after the ESD tests.

CTATESTING

CTATESTING

CTATESTING

CTATESTING

CTATESTING

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4.2.4. RF Electromagnetic Field

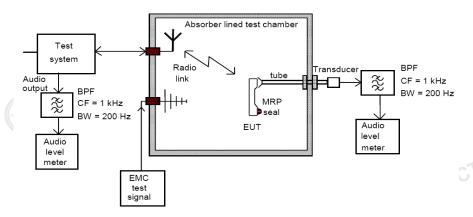
PERFORMANCE CRITERION

Criteria A

TEST LEVEL

CTA TESTING 3V/m (80%, 1kHz Amplitude Modulation)

TEST CONFIGURATION CTATESTING



TEST PROCEDURE

Please refer to ETSI EN 301 489-1 Clause 9.2.2 and EN 61000-4-3 for the measurement methods.

TEST MODE

TEST RESULTS

	TEST MODE		ction 2.3	511				
	Please reference	to the sec	ction 2.3					
	TEST RESULTS				CTATESTING			
		ı		T	EM.			
				Antenna	No would have	Observations	Jours .	
	Frequency	Level	Modulation	Polarization	EUT Face	(Performance Criterion)	Result	
CTATE			TESTING	V	Front	Α	Pass	
			TESTING	Н	FIOIIL	Α	Pass	
,		CT	7	V	Rear	Α	Pass	
				H	Real	Α	Pass	
	80MHz-6GHz	3 V/m	1 kHz, 80 % Amp. Mod, 1 % increment, dwell time=3seconds	V	Left	Α	Pass	
				Н		A	Pass	
C				V	Dight	Α	Pass	
G				Н	Right	Α	Pass	
		JAIG		V	Ton	Α	Pass	
	TES	Llla		Н	Тор	А	Pass	
	CTA				Bottom	Α	Pass	
	CTATES		TES	Н	DULLOTTI	Α	Pass	

Remark: A: No degradation in performance of the EUT was observed.

Note: During and after test, the EUT's (BT/WIFI) PER less than 10%, there is no any degradation of CTATE! performance.

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4.2.5. Surges

PERFORMANCE CRITERION

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Criteria B

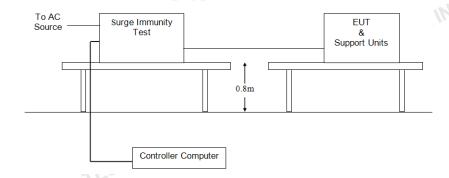
TEST LEVEL

1kV Line to Line: Differential mode

2kV Line to Ground: Common mode

(Voltage Waveform: 1.2/50 us; Current Waveform: 8/20 us)

TEST CONFIGURATION



TEST PROCEDURE

Please refer to ETSI EN 301 489-1 Clause 9.8.2 and EN 61000-4-5 for the measurement methods.

TEST RESULTS

<u>_</u>						C		_
	Location	Level(kV)	Pulse No	Surge Interval	Phase(deg)	Observations (Performance Criterion)	Result	CTATE
	TING				0°	A	Pass	
CTATE	L-N	± 1	5	G 60s	90°	A	Pass	
CIL	L-IN	ΙΙ	ESTIN	605	180°	A	Pass	
1		TO THE	ATE		270°	TING A	Pass	

Remark: A: N	13 mailin	n in performa	nce of the El	UT was observed.		TESTIN
Location	Level(kV)	Pulse No	Surge Interval	Observations (Performance Criterion)	Result	ly.
LAN Line to line	± 0.5K	5	60s	В	Pass	
CTAT		(EVIX	CTATES	TING	TESTING	

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4.2.6. RF- Common Mode 0.15MHz to 80MHz

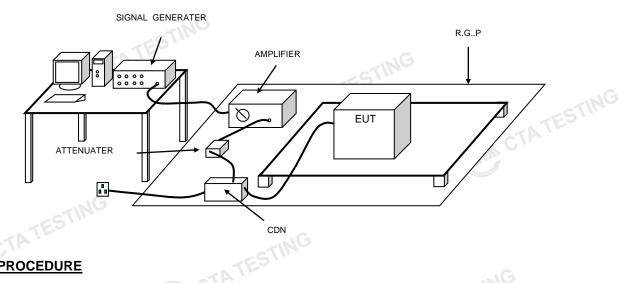
PERFORMANCE CRITERION

Criteria A

TEST LEVEL

3Vrms on AC main port (80%, 1kHz Amplitude Modulation)

TEST CONFIGURATION



TEST PROCEDURE

Please refer to ETSI EN 301 489-1 Clause 9.5.2 and EN 61000-4-6 for the measurement methods.

TEST RESULTS

	Frequency	Injected Position	Coupling Direct/Clamp	Level	Modulation	Observations (Performance	Result
CTATES	150kHz to 80MHz	AC Mains	Direct	3Vrms	1 kHz, 80 % Amp. Mod, 1 % increment, dwell time=3seconds	Criterion) A	Pass

Note: During and after test, the EUT's (BT/WIFI) PER less than 10%, there is no any degradation of TESTING performance.

For network Wire

I OI HELWOIK WHE					- A	
Frequency	Injected Position	Coupling Direct/Clamp	Level	Modulation	Observations (Performance Criterion)	Result
150kHz to 80MHz	network Wire	Clamp	3Vrms	1 kHz, 80 % Amp. Mod, 1 % increment, dwell time=3seconds	А	Pass
Remark: A: No d	egradation	in performance	of the EU	T was observed	ATESTING	
				GAV.		

4.2.7. Fast Transients Common Mode CTA TESTING

PERFORMANCE CRITERION

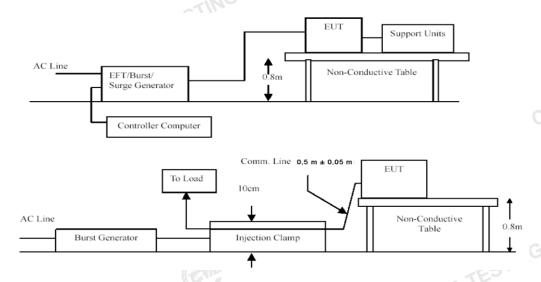
Criteria B

TEST LEVEL

1KV for AC main port

(Impulse Frequency: 5 kHz; Tr/Th: 5/50ns; Burst Duration: 15ms; Burst Period: 3Hz)

TEST CONFIGURATION



TEST PROCEDURE

Please refer to ETSI EN 301 489-1 Clause 9.4.2, EN55035 and EN 61000-4-4 for the measurement methods.

TEST RESULTS

<u>1201 K200210</u>		LING		
Lead under Test	Level (±Kv)	Coupling Direct/Clamp	Observations (Performance Criterion)	Result
L	±1	Direct	CTP A	Pass
N	±1	Direct	A	Pass
L-N	±1	Direct	А	Pass

Remark: A: No degradation in performance of the EUT was observed.

For network port

	Lead under Test	Level (±kV)	Coupling Direct/Clamp	Observations (Performance Criterion)	Result
Ī	Network Wire	±0.5	Clamp	A TESTING	Pass

Remark: A: No degradation in performance of the EUT was observed.



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4.2.8. Voltage Dips and Interruptions

PERFORMANCE CRITERION

>95% VD, 0.5 period----Performance criterion: B

>95% VD, 1.0 period----Performance criterion: B

30% VD, 25 period----Performance criterion: C

>95% VI, 250 period----Performance criterion: C

TEST LEVEL

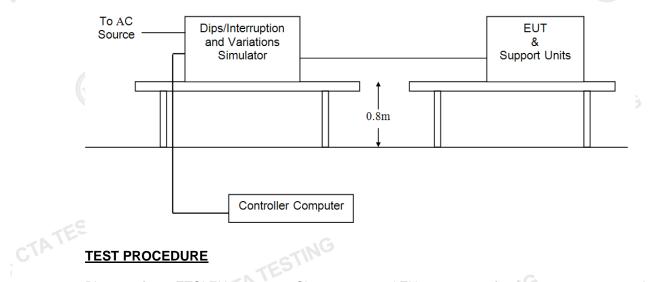
0% of VT(Supply Voltage) for 0.5 period

0% of VT(Supply Voltage) for 1.0 period

70% of VT(Supply Voltage) for 25 period

0% of VT(Supply Voltage) for 250 period

TEST CONFIGURATION



TEST PROCEDURE

Please refer to ETSI EN 301 489-1 Clause 9.7.2 and EN 61000-4-11 for the measurement methods.

TEST RESULTS

Flease felet to ETSI EN 301 409-1 Clause 9.7.2 and EN 01000-4-11 for the measurement methods.									
TEST RESUL	.TS		CTI CTI			TESTING			
Test Level % UT	Duration (Periods)	Phase angle	No. of drop out	Time between dropout	Observations (Performance Criterion)	Result			
0	0.5	0°, 90°, 180°, 270°	3	10s	A	Pass			
0	5 1.0	0°, 90°, 180°, 270°	3	10s	Α	Pass			
70	25	0°, 90°, 180°, 270°	33	10s	A	Pass			
0	250	0°, 90°, 180°, 270°	3	10s	В	Pass			

Remark:

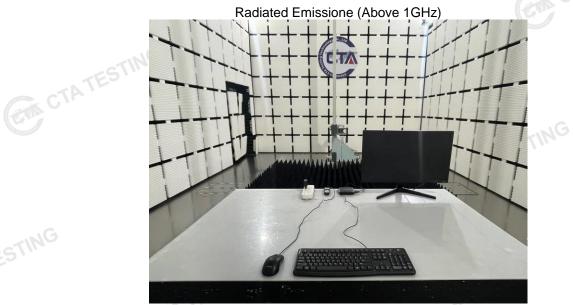
A: No degradation in performance of the EUT was observed.

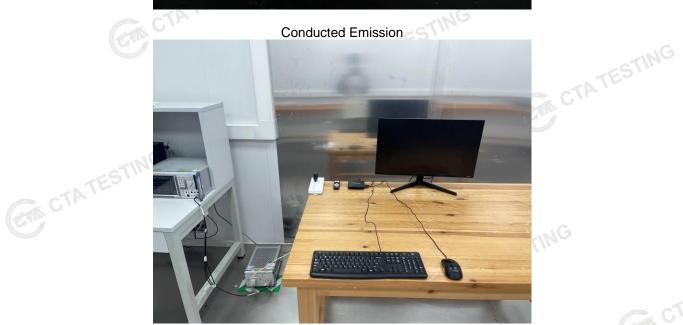
CTATE B: During the test, the power shut down, after the experiment, the function can automatically return to normal

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5. Test Set-up Photos of the EUT



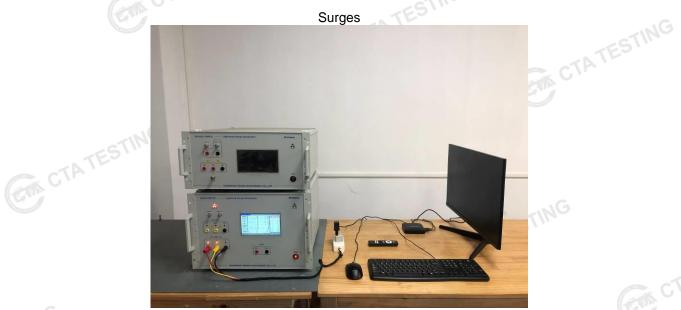




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Surges

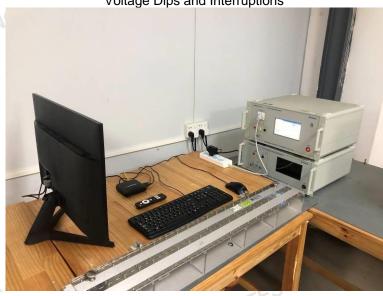


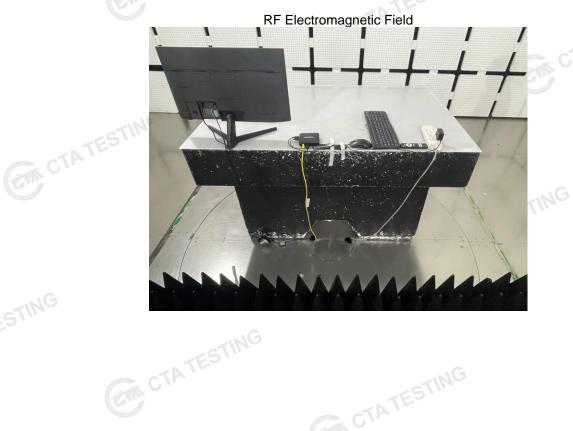
Fast Transients



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Voltage Dips and Interruptions





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6. External and Internal Photos of the EUT

CTATES







TATESTING

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GTING

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STING

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ESTING



Shenzhen CTA Testing Technology Co., Ltd.

Room 106, Building 1, Yibaolai Industrial Park, Qiaotou Community, Fuhai Street, Bao'an District, Shenzhen, China

TEST REPORT

IEC 62368-1

Audio/video, information and communication technology equipment

Part 1: Safety requirements

Report reference No. CTA25041800705

Tested by (name + signature) Kevin Liu

Approved by (name + signature).....: Eric Wang

Date of issue...... Apr. 28, 2025

Testing Laboratory Name Shenzhen CTA Testing Technology Co., Ltd.

Community, Fuhai Street, Bao 'an District, Shenzhen, China

Applicant's Name Shenzhen Haochuangyi Technology Co.,Ltd

Community, Dalang Street, Longhua District, Shenzhen

Test specification

Standard IEC 62368-1:2018

EN IEC 62368-1:2020+A11:2020

Test procedure CE-LVD

Non-standard test method: N/A

Test Report Form No. IEC62368_1E

TRF originator.....: UL(US)

Master TRF Dated 2022-04-14

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Test item description H96Max S905L3

Trademark H96 Max

Manufacturer Shenzhen Haochuangyi Technology Co.,Ltd

1101, Building 6, Changyi Industrial Plant, No.1 Lirong Road, Xinshi

CTATEST!

Community, Dalang Street, Longhua District, Shenzhen

Model and/or type reference H96Max S905L3

Ratings: Input: 12V === 1.0A

For AC ADAPTER

Input: 100-240V~ 50/60Hz 0.3A

Output: 12V===1.0A

List of Attachments (including a total number of pages in each attachment):

Appendix 1: National differences

Appendix 2: Photo document

Summary of testing:

The product covered by this report has been tested and complies with the applicable requirements of this standard.

Summary of compliance with National Differences:

List of countries addressed: European Group Differences and National Differences for details.

☐ The product fulfils the requirements of EN IEC 62368-1:2020+A11:2020

Copy of marking plat

H96 Max

H96Max S905L3

Model: H96Max S905L3 Input: 12V===1.0A

Manufacturer: Shenzhen Haochuangyi Technology Co.,Ltd

Importer: xxx Address: xxx



Made in China

CTATE

CTATESTING

Remark:

- 1. According to the EU directives, both of manufacturer and importer's name and address shall be affixed on the product or, where that is not possible, on its packaging or in a document accompanying the product before the product is placed on the EU market.
- 2. The height of CE mark shall be at least 5mm and the height of WEEE symbol shall be at least 7mm.

Test item particulars:	
Product group:	end product built-in component
Classification of use by:	$oxed{oxed}$ Ordinary person $oxed{oxed}$ Children likely present
CIL	Instructed person
C. VIII	Skilled person
Supply connection:	☐ AC mains ☐ DC mains
	not mains connected:
	☐ ES1 ☐ ES2 ☐ ES3
Supply tolerance:	+10%/-10%
	☐ +20%/-15% ☐ + %/ - %
ING	☐ + 76/ - 76 ☐ None
Supply connection – type:	☐ pluggable equipment type A -
Supply connection – type	non-detachable supply cord
(EVA	appliance coupler
	direct plug-in
	pluggable equipment type B -
	non-detachable supply cord
	appliance coupler
	permanent connection
NG.	☐ mating connector other: Not directly connected to
	mains
Considered current rating of protective device:	☐ A; Location: ☐ building ☐ equipment
	Location: ☐ building ☐ equipment ☐ N/A
Equipment mobility	☐ direct plug-in ☐ stationary ☐ for building-i
	wall/ceiling-mounted SRME/rack-mounted
	other:
Overvoltage category (OVC):	
	☐ OVC IV ☐ other: Not directly connected to
	mains
Class of equipment:	☐ Class II ☐ Class III ☐ Class III
On a sight in stallation to a site of STING	Not classified ☐
Special installation location:	N/A □ restricted access area□ outdoor location □
Pollution degree (PD):	☐ PD 1 ☐ PD 3
Manufacturer's specified T _{ma} :	40 °C U Outdoor: minimum °C
IP protection class:	40 °C ☐ Outdoor: minimum °C ☐ IPX0 ☐ IP ☐ TN ☐ TT ☐ IT - V L-L ☐ not AC mains
	☐ TN ☐ TT ☐ IT - V L-L
	M Hot / to mains
Altitude during operation (m):	≥ 2000 m or less m
Altitude of test laboratory (m):	
Mass of equipment (kg):	0.122kg
CTATES	Liles
	CTATESTING

GTA TESTING

GTA CTATE

	Possible test case verdicts:
	- test case does not apply to the test object: N/A
	- test object does meet the requirement: P (Pass)
	- test object does not meet the requirement: F (Fail)
	Testing: Date of receipt of test item : 2025-04-18
	Date of receipt of test item: 2025-04-18
	Date (s) of performance of tests: 2025-04-18 to 2025-04-28
	General remarks:
CTATE	"(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report. Throughout this report a comma / point is used as the decimal separator.
	General product information and other remarks:
	Product Description –
	1.The product is H96Max S905L3 intended to be used for audio/video, information and communication technology equipment, which supplied by a 12V DC port according to IEC/EN 62368-1 and meet ES1, PS2 requirements.
	2. The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of: 40°C.
	3. The equipment was evaluated for a maximum operating altitude up to 2000m.
	4.Based on the original report CTA25021500805, only adapter rating on the report home page are added.
	Model Differences – N/A

	Clause	Possible Hazard				
	5	Electrically-caused injury				
	Class and Energy Source	Body Part		Safeguards		
	(e.g. ES3: Primary circuit)	(e.g. Ordinary)	В	S	R	
	ES1: Input port	Ordinary	N/A	N/A	N/A	
	ES1: All internal circuits	Ordinary	N/A	N/A	N/A	
	6	Electrically-caused fire				
	Class and Energy Source	Material part		Safeguards		
l	(e.g. PS2: 100 Watt circuit)	(e.g. Printed board)	В	1 st S	2 nd S	
ŀ	PS2	Enclosure	See 6.3	Metallic	N/A	
ŀ	PS2	PCB	See 6.3	Min. V-1	N/A	
ŀ	PS2	Internal / external wiring	See 6.3	See 6.5	N/A	
	PS2	Other combustible components / materials	See 6.3	See 6.4.5	N/A	
	7	Injury caused by hazardous s	ubstances			
	Class and Energy Source	Body Part		Safeguards		
(e.	(e.g. Ozone)	(e.g., Skilled)	В	S	R	
ļ	N/A	N/A	N/A	N/A	N/A	
	8	Mechanically-caused injury				
١	Class and Energy Source	Body Part		Safeguards		
	(e.g. MS3: Plastic fan blades)	(e.g. Ordinary)	В	S	R	
ļ	MS1: the mass of equipment	Ordinary	N/A	N/A	N/A	
ļ	MS1: Edges and corners	Ordinary	N/A	N/A	N/A	
ı	9	Thermal burn				
	Class and Energy Source	Body Part		Safeguards		
		(e.g., Ordinary)	В	S	R	
ŀ	(e.g. TS1: Keyboard caps)					
	TS1: Accessible parts	Ordinary	N/A	N/A	N/A	
ŀ		Ordinary Radiation	N/A		N/A	
	TS1: Accessible parts 10 Class and Energy Source	Radiation Body Part		Safeguards	N/A	
	TS1: Accessible parts 10 Class and Energy Source (e.g. RS1: PMP sound output)	Radiation Body Part (e.g., Ordinary)	В	Safeguards S	R	
	TS1: Accessible parts 10 Class and Energy Source	Radiation Body Part		Safeguards		

ENERGY SOURCE DIAGRAM

CTATESTING

CTATESTING

CTATE

Report No. CTA25041800705

CTATE

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

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

⊠ ES ⊠ PS ⊠ MS ⊠ TS ⊠ RS

CTA TESTING

	IEC 62368-1		T
Clause	Requirement + Test	Result - Remark	Verdict
4	GENERAL REQUIREMENTS		Р
4.1.1	Acceptance of materials, components and subassemblies	-iNG	Р
4.1.2	Use of components	TESTIL	Р
4.1.3	Equipment design and construction	CTA	Р
4.1.4	Specified ambient temperature for outdoor use (°C)	Con	N/A
4.1.5	Constructions and components not specifically covered		P
4.1.8	Liquids and liquid filled components (LFC)	(See G.15)	N/A
4.1.15	Markings and instructions	(See Annex F)	Р
4.4.3	Safeguard robustness	STING	Р
4.4.3.1	General		P
4.4.3.2	Steady force tests	(See Clause T.3, T.4, T.5)	P
4.4.3.3	Drop tests	C CIP	N/A
4.4.3.4	Impact tests	(See Annex T.6)	Р
4.4.3.5	Internal accessible safeguard tests	Not applicable	N/A
4.4.3.6	Glass impact tests	(See Clause T.9, Annex U)	N/A
4.4.3.7	Glass fixation tests		N/A
(TIN)	Glass impact test (1J)		N/A
	Push/pull test (10 N)	STING	N/A
4.4.3.8	Thermoplastic material tests	(See Annex T.8)	Р
4.4.3.9	Air comprising a safeguard	CIP	N/A
4.4.3.10	Accessibility, glass, safeguard effectiveness		P
4.4.4	Displacement of a safeguard by an insulating liquid		N/A
4.4.5	Safety interlocks	(See Annex K)	N/A
4.5	Explosion		Р
4.5.1	General	(See Annex M for batteries)	N/A
4.5.2	No explosion during normal/abnormal operating condition	(See Clause B.2, B.3)	P
	No harm by explosion during single fault conditions	(See Clause B.4)	Р
4.6	Fixing of conductors	C.	N/A
	Fix conductors not to defeat a safeguard		N/A
	Compliance is checked by test:	(See Clause T.2)	N/A
4.7	Equipment for direct insertion into mains socket	-outlets	N/A
4.7.2	Mains plug part complies with relevant standard:		N/A
4.7.3	Torque (Nm)		N/A
4.8	Equipment containing coin/button cell batteries	ESTING	N/A
4.8.1	General	CTATE	N/A

G		IEC 62368-1			
	Clause	Requirement + Test	Result - Remark	Verdict	The state of the s
	4.8.2	Instructional safeguard:		N/A]
	4.8.3	Battery compartment door/cover construction		N/A	
\	S or The	Open torque test	TING	N/A	
	4.8.4.2	Stress relief test	TATES	N/A	
	4.8.4.3	Battery replacement test	CAN CI	N/A	7ES
	4.8.4.4	Drop test		N/A	CTA
	4.8.4.5	Impact test		N/A	
TE	4.8.4.6	Crush test		N/A	
CTA	4.8.5	Compliance		N/A	
		30N force test with test probe	.s.G	N/A	
		20N force test with test hook	ESTIN	N/A	
	4.9	Likelihood of fire or shock due to entry of condu	ictive object	N/A	G
	4.10	Component requirements	-<0	N/A	
	4.10.1	Disconnect Device	(See Annex L)	N/A	
G	4.10.2	Switches and relays	(See Annex G)	N/A	

5	ELECTRICALLY-CAUSED INJURY		Р	
5.2	Classification and limits of electrical energy source	ces	Р	-
5.2.2	ES1, ES2 and ES3 limits	. C.	Р	=
5.2.2.2	Steady-state voltage and current limits:	(See appended table 5.2)	Р	
5.2.2.3	Capacitance limits	(See appended table 5.2)	N/A	
5.2.2.4	Single pulse limits	(See appended table 5.2)	N/A	-0.75
5.2.2.5	Limits for repetitive pulses:	(See appended table 5.2)	N/A	CIN
5.2.2.6	Ringing signals	(See Annex H)	N/A	
5.2.2.7	Audio signals	(See Clause E.1)	N/A	
5.3	Protection against electrical energy sources		N/A	
5.3.1	General Requirements for accessible parts to ordinary, instructed and skilled persons	STING	N/A	
5.3.1 a)	Accessible ES1/ES2 derived from ES2/ES3 circuits		N/A	G
5.3.1 b)	Skilled persons not unintentional contact ES3 bare conductors	CTA	N/A	
5.3.2.1	Accessibility to electrical energy sources and safeguards	Car	N/A	
	Accessibility to outdoor equipment bare parts		N/A	
5.3.2.2	Contact requirements		N/A	
CAL	Test with test probe from Annex V		—	
5.3.2.2 a)	Air gap – electric strength test potential (V):	(See appended table 5.4.9)	N/A	
5.3.2.2 b)	Air gap – distance (mm):	TESTIN	N/A	



	IEC 62368-1]
Clause	Requirement + Test	Result - Remark	Verdict	1
5.3.2.3	Compliance		N/A]
5.3.2.4	Terminals for connecting stripped wire		N/A	
5.4	Insulation materials and requirements	- JAIG	N/A	
5.4.1.2	Properties of insulating material	TESTING	N/A	_
5.4.1.3	Material is non-hygroscopic	CTA	N/A	-
5.4.1.4	Maximum operating temperature for insulating materials:	(See appended table)	N/A	CTATE
5.4.1.5			N/A	
5.4.1.5.2	Pollution degrees Test for pollution degree 1 environment and for an insulating compound		N/A	
5.4.1.5.3	Thermal cycling test	NG.	N/A	-
5.4.1.6	Insulation in transformers with varying dimensions	STINC	N/A	1
5.4.1.7	Insulation in circuits generating starting pulses		N/A	G
5.4.1.8	Determination of working voltage:	(See appended table 5.4.1.8)	N/A	1
5.4.1.9	Insulating surfaces	(230 appended table 0.7.1.0)	N/A	-
5.4.1.10	Thermoplastic parts on which conductive metallic parts are directly mounted		N/A	
5.4.1.10.2	Vicat test:	(See appended table 5.4.1.10.2)	N/A	-
5.4.1.10.3	Ball pressure test:	(See appended table 5.4.1.10.3)	N/A	
5.4.2	Clearances	TESTIN	N/A	=
5.4.2.1	General requirements	CTA	N/A	
	Clearances in circuits connected to AC Mains, Alternative method	(See Annex X)	N/A	CTATE
5.4.2.2	Procedure 1 for determining clearance		N/A	
ES.	Temporary overvoltage:		_	
5.4.2.3	Procedure 2 for determining clearance		N/A	
5.4.2.3.2.2	a.c. mains transient voltage	TING		
5.4.2.3.2.3	d.c. mains transient voltage	51.,	_	C.
5.4.2.3.2.4	External circuit transient voltage:		_	5
5.4.2.3.2.5		- CTA	_	
5.4.2.4	Determining the adequacy of a clearance using an electric strength test:	(See appended table 5.4.2)	N/A	
5.4.2.5	Multiplication factors for clearances and test voltages		N/A	
5.4.2.6	Clearance measurement:	(See appended table 5.4.2)	N/A	1
5.4.3	Creepage distances	_	N/A	1
5.4.3.1	General	CTING	N/A	1
5.4.3.3	Material group:	TATES	_	-
19		CO .	(EW)	CTATE

	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
5.4.3.4	Creepage distances measurement:	(See appended table 5.4.3)	N/A
5.4.4	Solid insulation		N/A
5.4.4.1	General requirements	TING	N/A
5.4.4.2	Minimum distance through insulation:	(See appended table 5.4.4.2)	N/A
5.4.4.3	Insulating compound forming solid insulation	CI	N/A
5.4.4.4	Solid insulation in semiconductor devices		N/A
5.4.4.5	Insulating compound forming cemented joints		N/A
5.4.4.6	Thin sheet material		N/A
5.4.4.6.1	General requirements		N/A
5.4.4.6.2	Separable thin sheet material	NG	N/A
	Number of layers (pcs):	STIME	N/A
5.4.4.6.3	Non-separable thin sheet material		N/A
	Number of layers (pcs):	4 0	N/A
5.4.4.6.4	Standard test procedure for non-separable thin sheet material:	(See appended table 5.4.9)	N/A
5.4.4.6.5	Mandrel test		N/A
5.4.4.7	Solid insulation in wound components		N/A
5.4.4.9	Solid insulation at frequencies >30 kHz, E_P , K_R , d , V_{PW} (V)	(See appended Table 5.4.4.9)	N/A
3115	Alternative by electric strength test, tested voltage (V), K _R :	(See appended Tables 5.4.4.9 and 5.4.9)	N/A
5.4.5	Antenna terminal insulation	CTATE	N/A
5.4.5.1	General	CITA	N/A
5.4.5.2	Voltage surge test	COUNTY OF THE PROPERTY OF THE	N/A
5.4.5.3	Insulation resistance (M Ω):		N/A
	Electric strength test:	(See appended table 5.4.9)	N/A
5.4.6	Insulation of internal wire as part of supplementary safeguard	NG.	N/A
5.4.7	Tests for semiconductor components and for cemented joints	STI	N/A
5.4.8	Humidity conditioning		N/A
	Relative humidity (%), temperature (°C), duration (h):	GTA CTA	_
5.4.9	Electric strength test		N/A
5.4.9.1	Test procedure for type test of solid insulation:	(See appended table 5.4.9)	N/A
5.4.9.2	Test procedure for routine test		N/A
5.4.10	Safeguards against transient voltages from external circuits		N/A
5.4.10.1	Parts and circuits separated from external circuits	ESTING	N/A
5.4.10.2	Test methods	GTA TA	N/A

	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
5.4.10.2.1	General		N/A
5.4.10.2.2	Impulse test	(See appended table 5.4.9)	N/A
5.4.10.2.3	Steady-state test	(See appended table 5.4.9)	N/A
5.4.10.3	Verification for insulation breakdown for impulse test:	CTATESTI	N/A
5.4.11	Separation between external circuits and earth	CIP.	N/A
5.4.11.1	Exceptions to separation between external circuits and earth		N/A
5.4.11.2	Requirements		N/A
	SPDs bridge separation between external circuit and earth		N/A
	Rated operating voltage U _{op} (V):	STING	
	Nominal voltage U _{peak} (V):		_
	Max increase due to variation ΔU_{sp} :	- A	_
	Max increase due to ageing ∆Usa:	CIA CIA	_
5.4.11.3	Test method and compliance:	(See appended table 5.4.9)	N/A
5.4.12	Insulating liquid		N/A
5.4.12.1	General requirements		N/A
5.4.12.2	Electric strength of an insulating liquid:	(See appended table 5.4.9)	N/A
5.4.12.3	Compatibility of an insulating liquid:	(See appended table 5.4.9)	N/A
5.4.12.4	Container for insulating liquid:	TESTING	N/A
5.5	Components as safeguards	CTA	N/A
5.5.1	General	CAL	N/A
5.5.2	Capacitors and RC units		N/A
5.5.2.1	General requirement		N/A
5.5.2.2	Safeguards against capacitor discharge after disconnection of a connector:	(See appended table 5.5.2.2)	N/A
5.5.3	Transformers	LING	N/A
5.5.4	Optocouplers	(See sub-clause 5.4 or Clause G.12)	N/A
5.5.5	Relays	(See sub-clause 5.4)	N/A
5.5.6	Resistors	(See Clause G.10)	N/A
5.5.7	SPDs	(See Clause G.8)	N/A
5.5.8	Insulation between the mains and an external circuit consisting of a coaxial cable:		N/A
5.5.9	Safeguards for socket-outlets in outdoor equipment		N/A
AN C.	RCD rated residual operating current (mA):		_
5.6	Protective conductor	CTING	N/A
	Requirement for protective conductors	LE3.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
5.6	Protective conductor		N/A
5.6.2	Requirement for protective conductors		N/A
5.6.2.1	General requirements	CTING	N/A
5.6.2.2	Colour of insulation	TATES	N/A
5.6.3	Requirement for protective earthing conductors	CV.	N/A
	Protective earthing conductor size (mm²):	The state of the s	
TING	Protective earthing conductor serving as a reinforced safeguard		N/A
	Protective earthing conductor serving as a double safeguard		N/A
5.6.4	Requirements for protective bonding conductors	TING	N/A
5.6.4.1	Protective bonding conductors	51.	N/A
	Protective bonding conductor size (mm²):		_
5.6.4.2	Protective current rating (A):	CTP	N/A
5.6.5	Terminals for protective conductors	(cn)	N/A
5.6.5.1	Terminal size for connecting protective earthing conductors (mm):		N/A
of A	Terminal size for connecting protective bonding conductors (mm)		N/A
5.6.5.2	Corrosion		N/A
5.6.6	Resistance of the protective bonding system	GTING	N/A
5.6.6.1	Requirements	CTATES	N/A
5.6.6.2	Test Method:	(See appended table 5.6.6)	N/A
5.6.6.3	Resistance (Ω) or voltage drop:	(See appended table 5.6.6)	N/A
5.6.7	Reliable connection of a protective earthing conductor		N/A
5.6.8	Functional earthing		N/A
	Conductor size (mm²):	- Ca	N/A
	Class II with functional earthing marking:	STING	N/A
	Appliance inlet cl & cr (mm):		N/A
5.7	Prospective touch voltage, touch current and pro	otective conductor current	N/A
5.7.2	Measuring devices and networks	CTP CTP	N/A
5.7.2.1	Measurement of touch current		N/A
5.7.2.2	Measurement of voltage		N/A
5.7.3	Equipment set-up, supply connections and earth connections		N/A
5.7.4	Unearthed accessible parts:	(See appended table 5.7.4)	N/A
5.7.5	Earthed accessible conductive parts:	(See appended table 5.7.5)	N/A
5.7.6	Requirements when touch current exceeds ES2 limits	CTATES	N/A
		CI	(cir.

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Clause	Requirement + Test	Result - Remark	Verdict
-1A	Protective conductor current (mA):		N/A
CV	Instructional Safeguard:		N/A
5.7.7	Prospective touch voltage and touch current associated with external circuits	TESTING	N/A
5.7.7.1	Touch current from coaxial cables	CTA	N/A
5.7.7.2	Prospective touch voltage and touch current associated with paired conductor cables	6.7	N/A
5.7.8	Summation of touch currents from external circuits		N/A
	a) Equipment connected to earthed external circuits, current (mA):		N/A
	b) Equipment connected to unearthed external circuits, current (mA):	CTING	N/A
5.8	Backfeed safeguard in battery backed up supplie	es	N/A
	Mains terminal ES	(See appended table 5.8)	N/A
	Air gap (mm):	CTA	N/A
		CAD	

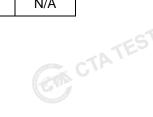
6	ELECTRICALLY- CAUSED FIRE		Р	
6.2	Classification of PS and PIS		Р	
6.2.2	Power source circuit classifications	(See appended table 6.2.2)	Р	
6.2.3	Classification of potential ignition sources		N/A	
6.2.3.1	Arcing PIS	(See appended table 6.2.3.1)	N/A	
6.2.3.2	Resistive PIS:	(See appended table 6.2.3.2)	N/A	
6.3	Safeguards against fire under normal operating a conditions	nd abnormal operating	N/A	
6.3.1	No ignition and attainable temperature value less than 90 % defined by ISO 871 or less than 300 °C for unknown materials:	(See appended table B.1.5 and B.3)	N/A	
	Combustible materials outside fire enclosure:		N/A	
6.4	Safeguards against fire under single fault condition	ons	Р	
6.4.1	Safeguard method	Method of "control of fire spread" is used.	Р	0.
6.4.2	Reduction of the likelihood of ignition under single fault conditions in PS1 circuits		N/A	
6.4.3	Reduction of the likelihood of ignition under single fault conditions in PS2 and PS3 circuits	CAN CAN	N/A	
6.4.3.1	Supplementary safeguards		N/A	
6.4.3.2	Single Fault Conditions:	(See appended table B.4)	N/A	
-TAT	Special conditions for temperature limited by fuse		N/A	
6.4.4	Control of fire spread in PS1 circuits		N/A	
6.4.5	Control of fire spread in PS2 circuits	CTING	Р	
	Supplementary safeguards	163	N/A	



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	Clause	Requirement + Test	Result - Remark	Verdict	
•	6.4.6	Control of fire spread in PS3 circuits		N/A	
	6.4.7	Separation of combustible materials from a PIS		N/A	
	6.4.7.2	Separation by distance	TING	N/A	
	6.4.7.3	Separation by a fire barrier	TATESI	N/A	
	6.4.8	Fire enclosures and fire barriers	CINCIN	N/A	
	6.4.8.2	Fire enclosure and fire barrier material properties		N/A	CTAT
	6.4.8.2.1	Requirements for a fire barrier		N/A	
TES	6.4.8.2.2	Requirements for a fire enclosure		N/A	
A	6.4.8.3	Constructional requirements for a fire enclosure and a fire barrier		N/A	
	6.4.8.3.1	Fire enclosure and fire barrier openings	GTING	N/A	
	6.4.8.3.2	Fire barrier dimensions	39.	N/A	
	6.4.8.3.3	Top openings and properties		N/A	
		Openings dimensions (mm):	CTA	N/A	
	6.4.8.3.4	Bottom openings and properties		N/A	
		Openings dimensions (mm):		N/A	
		Flammability tests for the bottom of a fire enclosure	(See Clause S.3)	N/A	
	TAT	Instructional Safeguard		N/A	
	6.4.8.3.5	Side openings and properties		N/A	
	Duentille	Openings dimensions (mm):	GTING	N/A	
	6.4.8.3.6	Integrity of a fire enclosure, condition met: a), b) or c):	CTATES	N/A	
	6.4.8.4	Separation of a PIS from a fire enclosure and a fire barrier distance (mm) or flammability rating:		N/A	
	6.4.9	Flammability of insulating liquid:		N/A	
TES	6.5	Internal and external wiring		Р	
	6.5.1	General requirements	Internal wiring rated VW-1	Р	
	6.5.2	Requirements for interconnection to building wiring	STING	N/A	
	6.5.3	Internal wiring size (mm²) for socket-outlets:		N/A	

7	INJURY CAUSED BY HAZARDOUS SUBSTANCES	N/A
7.2	Reduction of exposure to hazardous substances	N/A
7.3	Ozone exposure	N/A
7.4	Use of personal safeguards or personal protective equipment (PPE)	N/A
THE	Personal safeguards and instructions:	G –
7.5	Use of instructional safeguards and instructions	N/A
	CTA CTA	





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Clause	Requirement + Test	Result - Remark	Verdict
	Instructional safeguard (ISO 7010):		_
7.6	Batteries and their protection circuits		N/A
23 usattirity	CTA .	TING	•

	CV.	STING	ı	7
8	MECHANICALLY-CAUSED INJURY		Р	
8.2	Mechanical energy source classifications	(ET)	Р	
8.3	Safeguards against mechanical energy sources		P	CTA
8.4	Safeguards against parts with sharp edges and co	orners	P	
8.4.1	Safeguards		Р	
	Instructional Safeguard:		N/A	
8.4.2	Sharp edges or corners	Edges and corners of the enclosure are rounded.	Р	
8.5	Safeguards against moving parts		N/A	G
8.5.1	Fingers, jewellery, clothing, hair, etc., contact with MS2 or MS3 parts	C.T.A.	N/A	
	MS2 or MS3 part required to be accessible for the function of the equipment	CIN C	N/A	
	Moving MS3 parts only accessible to skilled person		N/A	
8.5.2	Instructional safeguard:		N/A	
8.5.4	Special categories of equipment containing moving parts		N/A	
8.5.4.1	General	STING	N/A	
8.5.4.2	Equipment containing work cells with MS3 parts	CTATES	N/A	
8.5.4.2.1	Protection of persons in the work cell	(CA)	N/A	
8.5.4.2.2	Access protection override		N/A	CTA
8.5.4.2.2.1	Override system		N/A	1
8.5.4.2.2.2	Visual indicator		N/A	
8.5.4.2.3	Emergency stop system		N/A	
	Maximum stopping distance from the point of activation (m)	ESTING	N/A	
	Space between end point and nearest fixed mechanical part (mm):		N/A	G
8.5.4.2.4	Endurance requirements	CTA	N/A	
	Mechanical system subjected to 100 000 cycles of operation	Cur	N/A	
	- Mechanical function check and visual inspection		N/A	
- 1	- Cable assembly		N/A	
8.5.4.3	Equipment having electromechanical device for destruction of media	.10	N/A	
8.5.4.3.1	Equipment safeguards	TESTING	N/A	
	Instructional safeguards against moving parts:		N/A	

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Clause	Requirement + Test	Result - Remark	Verdict	
8.5.4.3.3	Disconnection from the supply		N/A]
8.5.4.3.4	Cut type and test force (N)		N/A	
8.5.4.3.5	Compliance	-ING	N/A	
8.5.5	High pressure lamps	TESTIN	N/A	
0.0.0	Explosion test:	CTA.	N/A	
8.5.5.3	Glass particles dimensions (mm)		N/A	CTA
8.6	Stability of equipment		N/A	0 '
8.6.1	General		N/A	
	Instructional safeguard		N/A	
8.6.2	Static stability	.NG	N/A	
8.6.2.2	Static stability test	SING	N/A	
8.6.2.3	Downward force test		N/A	G
8.6.3	Relocation stability	TA	N/A	
	Wheels diameter (mm):	CIA CI	_	
	Tilt test		N/A	
8.6.4	Glass slide test		N/A	
8.6.5	Horizontal force test		N/A	
8.7	Equipment mounted to wall, ceiling or other struc	 cture	N/A	
8.7.1	Mount means type	TING	N/A	
8.7.2	Test methods	TESTI	N/A	
	Test 1, additional downwards force (N)	CIA	N/A	
	Test 2, number of attachment points and test force (N):		N/A	CTA
LING	Test 3 Nominal diameter (mm) and applied torque (Nm)		N/A	
8.8	Handles strength		N/A	
8.8.1	General	TING	N/A	
8.8.2	Handle strength test	511	N/A	G
	Number of handles:		_	
	Force applied (N):	CIA	_	
8.9	Wheels or casters attachment requirements	CIP	N/A	
8.9.2	Pull test		N/A	
8.10	Carts, stands and similar carriers		N/A	
8.10.1	General		N/A	
8.10.2	Marking and instructions:		N/A	
8.10.3	Cart, stand or carrier loading test	ETING	N/A	
	Loading force applied (N):	(2)	N/A	Ì

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	Clause	Requirement + Test	Result - Remark	Verdict
	8.10.4	Cart, stand or carrier impact test		N/A
	8.10.5	Mechanical stability		N/A
	2 mod links	Force applied (N):	GTING	
	8.10.6	Thermoplastic temperature stability	OTATES.	N/A
	8.11	Mounting means for slide-rail mounted equipmen	t (SRME)	N/A
	8.11.1	General	2000	N/A
	8.11.2	Requirements for slide rails		N/A
	1	Instructional Safeguard:		N/A
CIL	8.11.3	Mechanical strength test		N/A
	8.11.3.1	Downward force test, force (N) applied:	ING	N/A
	8.11.3.2	Lateral push force test	51111	N/A
	8.11.3.3	Integrity of slide rail end stops		N/A
	8.11.4	Compliance	- CIP	N/A
	8.12	Telescoping or rod antennas	CIN.	N/A
		Button/ball diameter (mm):		
	-			

	9	THERMAL BURN INJURY		Р
	9.2	Thermal energy source classifications		Р
	9.3	Touch temperature limits		Р
	9.3.1	Touch temperatures of accessible parts	(See appended table)	Р
	9.3.2	Test method and compliance		Р
	9.4	Safeguards against thermal energy sources		N/A
	9.5	Requirements for safeguards		N/A
	9.5.1	Equipment safeguard		N/A
CTATES	9.5.2	Instructional safeguard		N/A
0	9.6	Requirements for wireless power transmitters		N/A
	9.6.1	General		N/A
	9.6.2	Specification of the foreign objects		N/A
	9.6.3	Test method and compliance	(See appended table 9.6)	N/A

10	RADIATION		Р	
10.2	Radiation energy source classification		Р	
10.2.1	General classification		Р	
- CTA	Lasers		_	
N.	Lamps and lamp systems:	LED indicator RS1		
CAMPA	Image projectors:	STING	_	
	X-Ray:	CTATES	_	
		CIN		CTATES



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Clause	Requirement + Test	Result - Remark	Verdict	
-1.000	155		. 5.000]]
CTP	Personal music player:		_	
10.3	Safeguards against laser radiation	16	N/A	
2000	The standard(s) equipment containing laser(s) comply	TESTING	N/A	
10.4	Safeguards against optical radiation from lamps LED types)	and lamp systems (including	Р	- 4 [
10.4.1	General requirements	LED indicator RS1	Р	CV
SIING	Instructional safeguard provided for accessible radiation level needs to exceed		N/A	1
STING	Risk group marking and location:		N/A	
	Information for safe operation and installation	.Ca	N/A	
10.4.2	Requirements for enclosures	STING	N/A	
	UV radiation exposure:	(See Annex C)	N/A	G
10.4.3	Instructional safeguard:	- fb	N/A	
10.5	Safeguards against X-radiation	CTA	N/A	
10.5.1	Requirements		N/A	1
	Instructional safeguard for skilled persons:		_	
10.5.3	Maximum radiation (pA/kg):	(See appended tables B.3 & B.4)	_	
10.6	Safeguards against acoustic energy sources	1	N/A	
10.6.1	General	CTING	N/A	
10.6.2	Classification	TATES	N/A	
	Acoustic output L _{Aeq,T} , dB(A)	CAN CI	N/A	
	Unweighted RMS output voltage (mV)		N/A	CTI
ING	Digital output signal (dBFS)		N/A	
10.6.3	Requirements for dose-based systems		N/A	
10.6.3.1	General requirements		N/A	
10.6.3.2	Dose-based warning and automatic decrease	.s.G	N/A	
10.6.3.3	Exposure-based warning and requirements	ESTIN	N/A	
	30 s integrated exposure level (MEL30):		N/A	G
	Warning for MEL ≥ 100 dB(A)	-< \	N/A	
10.6.4	Measurement methods	CAN CIN	N/A	
10.6.5	Protection of persons		N/A	
	Instructional safeguards:		N/A	
10.6.6	Requirements for listening devices (headphones, earphones, etc.)		N/A	
10.6.6.1	Corded listening devices with analogue input		N/A	1
and the state of t	Listening device input voltage (mV):	CTING	N/A	
10.6.6.2	Corded listening devices with digital input	- STATES.	N/A	
				CTI

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Clause	Requirement + Test	Result - Remark	Verdict
T A	Max. acoustic output L _{Aeq,T} , dB(A):		N/A
10.6.6.3	Cordless listening devices		N/A
2 and this	Max. acoustic output L _{Aeq,T} , dB(A)	TING	N/A

CAL

B.1	CONDITION TESTS AND SINGLE FAULT CONDIT	ION 12313	Р
B.1.5	Temperature measurement conditions	(See appended table B.1.5)	P
B.2	Normal operating conditions	(Occ appended table B.1.0)	Р
B.2.1	General requirements:	(See Test Item Particulars and appended test tables)	P
	Audio Amplifiers and equipment with audio amplifiers:	(See Annex E)	N/A
B.2.3	Supply voltage and tolerances		Р
B.2.5	Input test:	(See appended table B.2.5)	Р
B.3	Simulated abnormal operating conditions		Р
B.3.1	General		Р
B.3.2	Covering of ventilation openings		Р
CTA	Instructional safeguard:		N/A
B.3.3	DC mains polarity test	· Ca	N/A
B.3.4	Setting of voltage selector	ESTING	N/A
B.3.5	Maximum load at output terminals	CTATA	Р
B.3.6	Reverse battery polarity	(EVA)	N/A
B.3.7	Audio amplifier abnormal operating conditions	40-13	N/A
B.3.8	Safeguards functional during and after abnormal operating conditions:	(See appended table B.3)	P
B.4	Simulated single fault conditions		Р
B.4.1	General	JG	Р
B.4.2	Temperature controlling device	STILL	N/A
B.4.3	Blocked motor test		N/A
B.4.4	Functional insulation	-TAT	Р
B.4.4.1	Short circuit of clearances for functional insulation	GAN.	Р
B.4.4.2	Short circuit of creepage distances for functional insulation		Р
B.4.4.3	Short circuit of functional insulation on coated printed boards		N/A
B.4.5	Short-circuit and interruption of electrodes in tubes and semiconductors		Р
B.4.6	Short circuit or disconnection of passive components	CTATESTIN	Р
G			E VI



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Clause	Requirement + Test	Result - Remark	Verdict
B.4.7	Continuous operation of components		N/A
B.4.8	Compliance during and after single fault conditions	(See appended table B.4)	Р
B.4.9	Battery charging and discharging under single fault conditions	(See Annex M)	N/A
С	UV RADIATION		N/A
C.1	Protection of materials in equipment from UV rac	diation	N/A
C.1.2	Requirements		N/A
C.1.3	Test method		N/A
C.2	UV light conditioning test		N/A
C.2.1	Test apparatus:	ING	N/A
C.2.2	Mounting of test samples	E2111	N/A
C.2.3	Carbon-arc light-exposure test		N/A
C.2.4	Xenon-arc light-exposure test	- cTA	N/A
D	TEST GENERATORS	() () () () () () () () () ()	N/A
D.1	Impulse test generators		N/A
D.2	Antenna interface test generator		N/A
D.3	Electronic pulse generator		N/A
E	TEST CONDITIONS FOR EQUIPMENT CONTAINI	NG AUDIO AMPLIFIERS	N/A
E.1	Electrical energy source classification for audio	signals	N/A
	Maximum non-clipped output power (W):	TEST	
	Rated load impedance (Ω):	CTA	
	Open-circuit output voltage (V):		
	Instructional safeguard:	See Clause F.5	
E.2	Audio amplifier normal operating conditions		N/A
E.2	Audio signal source type		
	Audio output power (W):		
	Audio output voltage (V)	GING	
	Rated load impedance (Ω):	23	
	Requirements for temperature measurement	(See Table B.1.5)	N/A
E.3	Audio amplifier abnormal operating conditions	(See Table B.3, B.4)	N/A
F	EQUIPMENT MARKINGS, INSTRUCTIONS, AND I	H.K.	P
F.1	General		Р
CTA	Language:	Instructions in English are reviewed.	_
F.2	Letter symbols and graphical symbols	ING	Р
		CTATESTING.	•





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	Clause	Requirement + Test	Result - Remark	Verdict
	F.2.1	Letter symbols according to IEC60027-1	Letter symbols for quantities and units are complied with IEC 60027-1.	Р
	F.2.2	Graphic symbols according to IEC, ISO or manufacturer specific	Graphical symbols are complied with IEC 60417, ISO 3864-2, ISO 7000 or ISO 7010.	Р
	F.3	Equipment markings		Р
	F.3.1	Equipment marking locations	The required marking is located on the enclosure of the equipment and is easily visible	P
TATE	F.3.2	Equipment identification markings		Р
	F.3.2.1	Manufacturer identification:	See copy of marking plate	Р
	F.3.2.2	Model identification:	See copy of marking plate	Р
	F.3.3	Equipment rating markings		Р
	F.3.3.1	Equipment with direct connection to mains		N/A
	F.3.3.2	Equipment without direct connection to mains	CTA	Р
	F.3.3.3	Nature of the supply voltage:	Not directly connected to mains	N/A
	F.3.3.4	Rated voltage:	See the marking	Р
	F.3.3.5	Rated frequency:		N/A
	F.3.3.6	Rated current or rated power:	See the marking	Р
	F.3.3.7	Equipment with multiple supply connections		N/A
	F.3.4	Voltage setting device	STING	N/A
	F.3.5	Terminals and operating devices	See below.	N/A
	F.3.5.1	Mains appliance outlet and socket-outlet markings	No such devices on the equipment.	N/A
	F.3.5.2	Switch position identification marking:	No such switch on the equipment.	N/A
TATE	F.3.5.3	Replacement fuse identification and rating markings	No such components	N/A
		Instructional safeguards for neutral fuse:	ING	N/A
	F.3.5.4	Replacement battery identification marking:	51.	N/A
	F.3.5.5	Neutral conductor terminal		N/A
	F.3.5.6	Terminal marking location	CIAT	N/A
	F.3.6	Equipment markings related to equipment classification	(CIP)	N/A
	F.3.6.1	Class I equipment	Class III equipment	N/A
	F.3.6.1.1	Protective earthing conductor terminal:		N/A
	F.3.6.1.2	Protective bonding conductor terminals:		N/A
	F.3.6.2	Equipment class marking:	. C.	N/A
	F.3.6.3	Functional earthing terminal marking:	ESTING	N/A
	F.3.7	Equipment IP rating marking:	CIATLE	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
F.3.8	External power supply output marking:		N/A
F.3.9	Durability, legibility and permanence of marking	Marking is considered to be legible and easily discernible. See also the following details	Р
F.3.10	Test for permanence of markings	The label was subjected to the permanence of marking test. The label was rubbed with cloth soaked with water for 15 sec. And then again for 15 sec. With the cloth soaked with petroleum spirit. After this test there was no damage to the label. The marking on the label did not fade. There was no curling and lifting of the label edge. After each test, the marking remained legible.	P
F.4	Instructions	CTA	Р
	a) Information prior to installation and initial use		N/A
	b) Equipment for use in locations where children not likely to be present		N/A
C	c) Instructions for installation and interconnection		Р
23 11 24 25 25 25 25 25 25 25 25 25 25 25 25 25	d) Equipment intended for use only in restricted access area	CTING	N/A
	e) Equipment intended to be fastened in place	-TATES.	N/A
	f) Instructions for audio equipment terminals	CI	N/A
	g) Protective earthing used as a safeguard		N/A
TING	h) Protective conductor current exceeding ES2 limits		N/A
STING	i) Graphic symbols used on equipment		Р
	j) Permanently connected equipment not provided with all-pole mains switch	-ING	N/A
	k) Replaceable components or modules providing safeguard function	51	N/A
	I) Equipment containing insulating liquid	-17	N/A
	m) Installation instructions for outdoor equipment	CA CIN	N/A
F.5	Instructional safeguards		N/A
G	COMPONENTS		Р
G.1	Switches		N/A
G.1.1	General		N/A
G.1.2	Ratings, endurance, spacing, maximum load		N/A
G.1.3	Test method and compliance	STING	N/A
G.2	Relays	TATES	N/A

		IEC 62368-1		
	Clause	Requirement + Test	Result - Remark	Verdict
	G.2.1	Requirements		N/A
	G.2.2	Overload test		N/A
	G.2.3	Relay controlling connectors supplying power to other equipment	TESTING	N/A
-	G.2.4	Test method and compliance	CTA	N/A
ŀ	G.3	Protective devices	C. I.	N/A
	G.3.1	Thermal cut-offs		N/A
TES	TING	Thermal cut-outs separately approved according to IEC 60730 with conditions indicated in a) & b)		N/A
•		Thermal cut-outs tested as part of the equipment as indicated in c)		N/A
Ī	G.3.1.2	Test method and compliance	STING	N/A
Ī	G.3.2	Thermal links		N/A
-	G.3.2.1	a) Thermal links tested separately according to IEC 60691 with specifics	CTA	N/A
		b) Thermal links tested as part of the equipment	Car	N/A
	G.3.2.2	Test method and compliance		N/A
	G.3.3	PTC thermistors		N/A
	G.3.4	Overcurrent protection devices		N/A
	G.3.5	Safeguards components not mentioned in G.3.1 to G.3.4	-NG	N/A
Ī	G.3.5.1	Non-resettable devices suitably rated and marking provided	CTATESTIN	N/A
	G.3.5.2	Single faults conditions:	(See appended table B.4)	N/A
	G.4	Connectors		N/A
	G.4.1	Spacings		N/A
(ES	G.4.2	Mains connector configuration:		N/A
	G.4.3	Plug is shaped that insertion into mains socket- outlets or appliance coupler is unlikely	.16	N/A
Ī	G.5	Wound components	STING	N/A
	G.5.1	Wire insulation in wound components		N/A
	G.5.1.2	Protection against mechanical stress	- 1	N/A
	G.5.2	Endurance test	CAN CITA	N/A
	G.5.2.1	General test requirements		N/A
	G.5.2.2	Heat run test		N/A
		Test time (days per cycle):		_
1	CIA	Test temperature (°C):		_
	G.5.2.3	Wound components supplied from the mains	·C	N/A
	G.5.2.4	No insulation breakdown	ESTING	N/A
ŀ	G.5.3	Transformers	CIATE	N/A

Clause	IEC 62368-1	Docult Domail:	\
Clause	Requirement + Test	Result - Remark	Verdict
G.5.3.1	Compliance method:		N/A
SAN C	Position:		N/A
13 100 H 11 11 11	Method of protection:	TING	N/A
G.5.3.2	Insulation	TATES	N/A
	Protection from displacement of windings:	C.	
G.5.3.3	Transformer overload tests		N/A
G.5.3.3.1	Test conditions		N/A
G.5.3.3.2	Winding temperatures		N/A
G.5.3.3.3	Winding temperatures - alternative test method		N/A
G.5.3.4	Transformers using FIW	.s.IG	N/A
G.5.3.4.1	General	ESTIN	N/A
	FIW wire nominal diameter		_
G.5.3.4.2	Transformers with basic insulation only	~1	N/A
G.5.3.4.3	Transformers with double insulation or reinforced insulation	CAN CIT	N/A
G.5.3.4.4	Transformers with FIW wound on metal or ferrite core		N/A
G.5.3.4.5	Thermal cycling test and compliance		N/A
G.5.3.4.6	Partial discharge test		N/A
G.5.3.4.7	Routine test	TING	N/A
G.5.4	Motors	TEST	N/A
G.5.4.1	General requirements	Car Cir	N/A
G.5.4.2	Motor overload test conditions		N/A
G.5.4.3	Running overload test		N/A
G.5.4.4.2	Locked-rotor overload test		N/A
	Test duration (days):		
G.5.4.5	Running overload test for DC motors	·C	N/A
G.5.4.5.2	Tested in the unit	ESTING	N/A
G.5.4.5.3	Alternative method		N/A
G.5.4.6	Locked-rotor overload test for DC motors		N/A
G.5.4.6.2	Tested in the unit	CTP	N/A
	Maximum Temperature:		N/A
G.5.4.6.3	Alternative method		N/A
G.5.4.7	Motors with capacitors		N/A
G.5.4.8	Three-phase motors		N/A
G.5.4.9	Series motors		N/A
2 catt	Operating voltage:	STING	_
G.6	Wire Insulation	CIATES	N/A
	•		

Clause	IEC 62368-1 Requirement + Test	Result - Remark	Verdict
	46111	Ivesuit - Iveillaik	
G.6.1	General		N/A
G.6.2	Enamelled winding wire insulation		N/A
G.7	Mains supply cords	STING	N/A
G.7.1	General requirements	TATES	N/A
	Type:	Carry C.	
G.7.2	Cross sectional area (mm² or AWG):		N/A
G.7.3	Cord anchorages and strain relief for non- detachable power supply cords		N/A
G.7.3.2	Cord strain relief		N/A
G.7.3.2.1	Requirements		N/A
	Strain relief test force (N):	GING	N/A
G.7.3.2.2	Strain relief mechanism failure		N/A
G.7.3.2.3	Cord sheath or jacket position, distance (mm):		N/A
G.7.3.2.4	Strain relief and cord anchorage material	CT	N/A
G.7.4	Cord Entry		N/A
G.7.5	Non-detachable cord bend protection		N/A
G.7.5.1	Requirements		N/A
G.7.5.2	Test method and compliance		N/A
20 03500	Overall diameter or minor overall dimension, <i>D</i> (mm):	TING	_
	Radius of curvature after test (mm)	TESI	
G.7.6	Supply wiring space	Car Cir	N/A
G.7.6.1	General requirements		N/A
G.7.6.2	Stranded wire		N/A
G.7.6.2.1	Requirements		N/A
G.7.6.2.2	Test with 8 mm strand		N/A
G.8	Varistors	·C	N/A
G.8.1	General requirements	ESTINO	N/A
G.8.2	Safeguards against fire		N/A
G.8.2.1	General	- N	N/A
G.8.2.2	Varistor overload test	CTI	N/A
G.8.2.3	Temporary overvoltage test		N/A
G.9	Integrated circuit (IC) current limiters		N/A
G.9.1	Requirements		N/A
CIA	IC limiter output current (max. 5A):		_
WIN.	Manufacturers' defined drift:		_
G.9.2	Test Program	STING	N/A
G.9.3	Compliance	CTATES	N/A
	1		CIN.

G		IEC 62368-1		
	Clause	Requirement + Test	Result - Remark	Verdict
	G.10	Resistors		N/A
	G.10.1	General		N/A
	G.10.2	Conditioning	TING	N/A
	G.10.3	Resistor test	TESTI	N/A
	G.10.4	Voltage surge test	Can Cita	N/A
	G.10.5	Impulse test	Towns of the second	N/A
	G.10.6	Overload test		N/A
	G.11	Capacitors and RC units		N/A
CTATL	G.11.1	General requirements		N/A
	G.11.2	Conditioning of capacitors and RC units	.Ca	N/A
	G.11.3	Rules for selecting capacitors	ESTING	N/A
	G.12	Optocouplers		N/A
		Optocouplers comply with IEC 60747-5-5 with specifics	C CTA	N/A
		Type test voltage V _{ini,a} :		_
		Routine test voltage, V _{ini, b} :		_
	G.13	Printed boards		Р
	G.13.1	General requirements	Approved Printed board used	Р
	G.13.2	Uncoated printed boards		Р
	G.13.3	Coated printed boards	GTING	N/A
	G.13.4	Insulation between conductors on the same inner surface	CONCTATES	N/A
	G.13.5	Insulation between conductors on different surfaces	The state of the s	N/A
	.6	Distance through insulation:		N/A
	LINO	Number of insulation layers (pcs):		
CTATL	G.13.6	Tests on coated printed boards		N/A
	G.13.6.1	Sample preparation and preliminary inspection	. C.	N/A
	G.13.6.2	Test method and compliance	STING	N/A
	G.14	Coating on components terminals		N/A
	G.14.1	Requirements:	(See Clause G.13)	N/A
	G.15	Pressurized liquid filled components	CTA	N/A
	G.15.1	Requirements		N/A
	G.15.2	Test methods and compliance		N/A
	G.15.2.1	Hydrostatic pressure test		N/A
	G.15.2.2	Creep resistance test		N/A
	G.15.2.3	Tubing and fittings compatibility test		N/A
	G.15.2.4	Vibration test	GTING	N/A
	G.15.2.5	Thermal cycling test	CTATES	N/A

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Clause	Requirement + Test	Result - Remark	Verdic
G.15.2.6	Force test		N/A
G.15.3	Compliance		N/A
G.16	IC including capacitor discharge function (ICX)		N/A
G.16.1	Condition for fault tested is not required	TESTING	N/A
0.10.1	ICX with associated circuitry tested in equipment	CTA	N/A
	ICX tested separately		N/A
G.16.2	Tests		N/A
TIME	Smallest capacitance and smallest resistance specified by ICX manufacturer for impulse test:		_
	Mains voltage that impulses to be superimposed on	-ING	
	Largest capacitance and smallest resistance for ICX tested by itself for 10000 cycles test:	251	
G.16.3	Capacitor discharge test:		N/A
Н	CRITERIA FOR TELEPHONE RINGING SIGNALS		N/A
H.1	General		N/A
H.2	Method A		N/A
H.3	Method B		N/A
H.3.1	Ringing signal		N/A
H.3.1.1	Frequency (Hz):		—
H.3.1.2	Frequency (Hz)	ESTING	_
H.3.1.3	Cadence; time (s) and voltage (V):	CTATA	_
H.3.1.4	Single fault current (mA)::	(CVP)	_
H.3.2	Tripping device and monitoring voltage		N/A
H.3.2.1	Conditions for use of a tripping device or a monitoring voltage		N/A
H.3.2.2	Tripping device		N/A
H.3.2.3	Monitoring voltage (V):	JUG	N/A
J	INSULATED WINDING WIRES FOR USE WITHOU	T INTERLEAVED INSULATION	N/A
J.1	General		N/A
	Winding wire insulation:	TA	
	Solid round winding wire, diameter (mm):	Can Ci	N/A
	Solid square and rectangular (flatwise bending) winding wire, cross-sectional area (mm²):		N/A
J.2/J.3	Tests and Manufacturing	(See separate test report)	_
K	SAFETY INTERLOCKS		N/A
K.1	General requirements		N/A
	Instructional safeguard:		N/A
K.2	Components of safety interlock safeguard mecha	anism	N/A

Clause	Requirement + Test	Result - Remark	Verdict
K.3	Inadvertent change of operating mode		N/A
K.4	Interlock safeguard override		N/A
K.5	Fail-safe	STING	N/A
K.5.1	Under single fault condition	TATES	N/A
K.6	Mechanically operated safety interlocks	CENT C.	N/A
K.6.1	Endurance requirement		N/A
K.6.2	Test method and compliance:		N/A
K.7	Interlock circuit isolation		N/A
K.7.1	Separation distance for contact gaps & interlock circuit elements		N/A
	In circuit connected to mains, separation distance for contact gaps (mm):		N/A
	In circuit isolated from mains, separation distance for contact gaps (mm):		N/A
	Electric strength test before and after the test of K.7.2:	(See appended table 5.4.9)	N/A
K.7.2	Overload test, Current (A):		N/A
K.7.3	Endurance test		N/A
K.7.4	Electric strength test		N/A
L	DISCONNECT DEVICES		N/A
L.1	General requirements		N/A
L.2	Permanently connected equipment		N/A
L.3	Parts that remain energized		N/A
L.4	Single-phase equipment		N/A
L.5	Three-phase equipment		N/A
L.6	Switches as disconnect devices		N/A
L.7	Plugs as disconnect devices		N/A
L.8	Multiple power sources		N/A
	Instructional safeguard:		N/A
М	EQUIPMENT CONTAINING BATTERIES AND THE	EIR PROTECTION CIRCUITS	N/A
M.1	General requirements		N/A
M.2	Safety of batteries and their cells	GM.	N/A
M.2.1	Batteries and their cells comply with relevant IEC standards:		N/A
M.3	Protection circuits for batteries provided within the equipment		N/A
M.3.1	Requirements		N/A
M.3.2	Test method		N/A
	Overcharging of a rechargeable battery		N/A
		CIN CIN	(en

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Clause	Requirement + Test Result - Remark	Verdict
	Excessive discharging	N/A
	Unintentional charging of a non-rechargeable battery	N/A
	Reverse charging of a rechargeable battery	N/A
M.3.3	Compliance (See appended table M.3)	N/A
M.4	Additional safeguards for equipment containing a portable secondary lithium battery	N/A
M.4.1	General	N/A
M.4.2	Charging safeguards	N/A
M.4.2.1	Requirements	N/A
M.4.2.2	Compliance: (See appended table M.4.2)	N/A
M.4.3	Fire enclosure:	N/A
M.4.4	Drop test of equipment containing a secondary lithium battery	N/A
M.4.4.2	Preparation and procedure for the drop test	N/A
M.4.4.3	Drop, Voltage on reference and dropped batteries (V); voltage difference during 24 h period (%)::	N/A
M.4.4.4	Check of the charge/discharge function	N/A
M.4.4.5	Charge / discharge cycle test	N/A
M.4.4.6	Compliance	N/A
M.5	Risk of burn due to short-circuit during carrying	N/A
M.5.1	Requirement	N/A
M.5.2	Test method and compliance	N/A
M.6	Safeguards against short-circuits	N/A
M.6.1	External and internal faults	N/A
M.6.2	Compliance	N/A
M.7	Risk of explosion from lead acid and NiCd batteries	N/A
M.7.1	Ventilation preventing explosive gas concentration	N/A
	Calculated hydrogen generation rate:	N/A
M.7.2	Test method and compliance	N/A
	Minimum air flow rate, Q (m³/h)::	N/A
M.7.3	Ventilation tests	N/A
M.7.3.1	General	N/A
M.7.3.2	Ventilation test – alternative 1	N/A
	Hydrogen gas concentration (%):	N/A
M.7.3.3	Ventilation test – alternative 2	N/A
	Obtained hydrogen generation rate:	N/A
M.7.3.4	Ventilation test – alternative 3	N/A
	Hydrogen gas concentration (%):	N/A

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	Clause	Requirement + Test	Result - Remark	Verdict
	M.7.4	Marking:		N/A
	M.8	Protection against internal ignition from externa with aqueous electrolyte	I spark sources of batteries	N/A
	M.8.1	General	21810	N/A
	M.8.2	Test method	CTA.	N/A
	M.8.2.1	General		N/A
	M.8.2.2	Estimation of hypothetical volume V_Z (m³/s):		_
	M.8.2.3	Correction factors:		
	M.8.2.4	Calculation of distance d (mm):		
, ,	M.9	Preventing electrolyte spillage		N/A
	M.9.1	Protection from electrolyte spillage		N/A
	M.9.2	Tray for preventing electrolyte spillage		N/A
	M.10	Instructions to prevent reasonably foreseeable misuse		N/A
		Instructional safeguard:		N/A
	N	ELECTROCHEMICAL POTENTIALS		N/A
		Material(s) used:		
	0	MEASUREMENT OF CREEPAGE DISTANCES AN	ID CLEARANCES	N/A
	5	Value of X (mm):		_
	Р	SAFEGUARDS AGAINST CONDUCTIVE OBJECT	S	Р
	P.1	General		Р
	P.2	Safeguards against entry or consequences of er	ntry of a foreign object	N/A
	P.2.1	General		N/A
	P.2.2	Safeguards against entry of a foreign object		N/A
		Location and Dimensions (mm):		_
TAI	P.2.3	Safeguards against the consequences of entry of a foreign object		N/A
	P.2.3.1	Safeguard requirements		N/A
		The ES3 and PS3 keep-out volume in Figure P.3 not applicable to transportable equipment		N/A
		Transportable equipment with metalized plastic parts:		N/A
	P.2.3.2	Consequence of entry test:		N/A
	P.3	Safeguards against spillage of internal liquids		
	P.3.1	General		N/A
	P.3.2	Determination of spillage consequences		N/A
	P.3.3	Spillage safeguards		N/A
	P.3.4	Compliance		N/A
	P.4	Metallized coatings and adhesives securing part	s CIA	N/A

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	Clause	Requirement + Test	Result - Remark	Verdict
	P.4.1	General		N/A
	P.4.2	Tests		N/A
		Conditioning, T _C (°C):		
-		Duration (weeks):		
-	Q	CIRCUITS INTENDED FOR INTERCONNECTION	WITH BUILDING WIRING	N/A
	Q.1	Limited power sources		N/A
-	Q.1.1	Requirements		N/A
TES		a) Inherently limited output		N/A
TA		b) Impedance limited output		N/A
-		c) Regulating network limited output		N/A
-		d) Overcurrent protective device limited output		N/A
-		e) IC current limiter complying with G.9		N/A
-	Q.1.2	Test method and compliance:	(See appended table Q.1)	N/A
-		Current rating of overcurrent protective device (A)		N/A
-	Q.2	Test for external circuits – paired conductor cable		N/A
_		Maximum output current (A):		N/A
		Current limiting method:		
	R	LIMITED SHORT CIRCUIT TEST		N/A
-	R.1	General		N/A
-	R.2	Test setup		N/A
-		Overcurrent protective device for test:		
-	R.3	Test method		N/A
-59		Cord/cable used for test:		
TATE	R.4	Compliance		N/A
	S	TESTS FOR RESISTANCE TO HEAT AND FIRE		N/A
-	S.1	Flammability test for fire enclosures and fire bar where the steady state power does not exceed 4		N/A
-		Samples, material:		_
-		Wall thickness (mm):		_
-		Conditioning (°C):		
-		Test flame according to IEC 60695-11-5 with conditions as set out		N/A
F		- Material not consumed completely		N/A
		- Material extinguishes within 30s		N/A
		- No burning of layer or wrapping tissue		N/A
	S.2	Flammability test for fire enclosure and fire barr	ier integrity	N/A

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

Clause	Requirement + Test	Result - Remark	Verdict
٧	DETERMINATION OF ACCESSIBLE PARTS		N/A
V.1	Accessible parts of equipment		N/A
V.1.1	General		N/A
V.1.2	Surfaces and openings tested with jointed test probes		N/A
V.1.3	Openings tested with straight unjointed test probes		N/A
V.1.4	Plugs, jacks, connectors tested with blunt probe		N/A
V.1.5	Slot openings tested with wedge probe		N/A
V.1.6	Terminals tested with rigid test wire		N/A
V.2	Accessible part criterion		N/A
Х	ALTERNATIVE METHOD FOR DETERMINING CLEA CIRCUITS CONNECTED TO AN AC MAINS NOT EXC RMS)		N/A
	Clearance (See appended table X)	N/A
Υ	CONSTRUCTION REQUIREMENTS FOR OUTDOOR	ENCLOSURES	N/A
Y.1	General		N/A
Y.2	Resistance to UV radiation		N/A
Y.3	Resistance to corrosion		N/A
Y.3	Resistance to corrosion		N/A
Y.3.1	Metallic parts of outdoor enclosures are resistant to effects of water-borne contaminants by:		N/A
Y.3.2	Test apparatus		N/A
Y.3.3	Water – saturated sulphur dioxide atmosphere		N/A
Y.3.4	Test procedure:		N/A
Y.3.5	Compliance		N/A
Y.4	Gaskets		N/A
Y.4.1	General		N/A
Y.4.2	Gasket tests		N/A
Y.4.3	Tensile strength and elongation tests		N/A
	Alternative test methods:		N/A
Y.4.4	Compression test		N/A
Y.4.5	Oil resistance		N/A
Y.4.6	Securing means (See Annex P.4)	N/A
Y.5	Protection of equipment within an outdoor enclosur	re	N/A
Y.5.1	General		N/A
Y.5.2	Protection from moisture		N/A
	Relevant tests of IEC 60529 or Y.5.3:		N/A
Y.5.3	Water spray test		N/A
Y.5.4	Protection from plants and vermin		
riNG		C P	N/A

Clause	Requirement + Test	Result - Remark	Verdict
	- CS (11)		
Y.5.5	Protection from excessive dust		N/A
Y.5.5.1	General		N/A
Y.5.5.2	IP5X equipment		N/A
Y.5.5.3	IP6X equipment		N/A
Y.6	Mechanical strength of enclosures		N/A
Y.6.1	General		N/A
Y.6.2	Impact test	(See Table T.6)	N/A
Illia			

	.s.IG	IEC 62368-1		
Clause	Requirement + Test		Result - Remark	Verdict

0.0.0.0							
CTA		Ġ.	TING	·			
5.2	TABLE: Classificati	on of electrical er	nergy sou	ırces		NG.	Р
Supply Voltage	Location (e.g.	Test conditions	Parameters				ES Class
Vollage	designation)		U (V)	I (mA)	Type ¹⁾	Additional Info ²⁾	_ Class
12Vdc	All circuits	Normal:			SS		Startie Control
CING		Abnormal:			SS		ES1 (declar
		Single fault – SC/OC)			SS		ed)
	any information:	1.4.4.					

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

5.4.1.8	TABLE: Working voltage	TABLE: Working voltage measurement					
Location		RMS voltage (V)	Peak voltage (V)	Frequency (Hz)	Commo	ents	
	STING						
CIAT	E		NG				
Supplement	ary information:						
Durate Maria	age we	CTA			TING		

		Gui.	TATE		
5.4.1.10.2	TABLE: Vicat s	oftening temperature of thermo	pplastics		N/A
Method			: ISO 306 / B50		_
Object/ Par	rt No./Material	Manufacturer/trademark	Thickness (mm)	T soften	ing (°C)
5/11/					
		TING			
Supplemen	ntary information:			'	
	GEVA.		TESTIN		

5.4.1.10.3	TABLE: Ball p	ressure test of thermopla	stics			-1A	N/A
Allowed imp	ression diamete	er (mm)	:	≤ 2 m	ım (C.	
Object/Part	No./Material	Manufacturer/trademark	Thickness	(mm)	Test temperature (°C)		ession ter (mm)
	ESTING						
Supplement	ary information:						
		TEST				G	
		CIN CIN			CTATESTIN		



	.NG	IEC 62368-1		
Clause	Requirement + Test		Result - Remark	Verdict
CTP		CTING		

5.4.2, 5.4.3 TABLE: Minimum Clearances/Creepage distance								N/A
Clearance (cl) and creepage distance (cr) at/of/between:	U _p (V)	U _{rms} (V)	Freq 1) (Hz)	Required cl (mm)	cl (mm)	E.S. ²⁾ (V)	Required cr (mm)	cr (mm)
					The same of the sa			110

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

5.4.4.2	TABLE: Minimum distance through insulation							
Distance the (DTI) at/of	ough insulation	Peak voltage (V)	Insulation	Required DTI (mm)	Mea	asured DTI (mm)		
		The state of the s		(Sec. Lie	:TP	11		
Supplement	ary information:							
				To would				

5.4.4.9 TABLE: Solid insulation at frequencies >30 kHz						
Insulation material	E _P	Frequency (kHz)	K _R	Thickness d (mm)	Insulation	V _{PW} (Vpk)
	G				ESTING	
Supplementary information:						
				CAN		
				03.180		20 Tra

	5.4.9	TABLE: Electric strength test	s		N/A
TATES	Test volta	age applied between:	Voltage shape (Surge, Impulse, AC, DC, etc.)	Test voltage (V)	Breakdown Yes / No
		CIR	STI	10	
			CTATE		- IN
	Supplem	entary information:			
			To make the	louis .	JP.

5.5.2.2	TABLE:	Stored discharge of	on capacitors			N/A
Location		Supply voltage (V)	Operating and fault condition 1)	Switch position	Measured voltage (Vpk)	ES Class
ALE.			ATES		NG.	
		C. M. C.		CTA CTA	TESTING	



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Clauses	Dest.	mont . Test	IEC 62		Decult Dec		Mandle		
Clause	Require	ment + Test		16	Result - Remar	K	Verdict		
GI				No					
Supplementary information: X-capacitors installed for testing:									
[] bleed	ing resisto	rating:	normal operation,	or open fus	e), SC= short c	ircuit, OC=	open circuit		
. G							(
5.6.6	TABLE:	Resistance of p	protective condu	ctors and to	erminations		N/A		
Location	·		Test current (A)	Durati (min		age drop (V)	Resistance (Ω)		
	110 110	CTA			TING				
Suppleme	ntary inform	nation:							
	0300			Z C / L			ESTI		
				1		C	TA		
5.7.4	TABLE:	Unearthed acc	essible parts				N/A		
Location		Operating and	Supply		Parameters				
		fault conditions	Voltage (V)	Voltage (V _{rms} or V			•		
CTP.			-GTV	1G					
Suppleme	ntary inforr	nation:				·	·		
Abbreviati	on: SC= sl	nort circuit; OC=	open circuit		4	ESTIN			
		23,000	7		CTA				
5.7.5	TABLE:	Earthed acces	sible conductive	e part	CAL		N/A		
Supply vo	ltage (V)	:					_		
Phase(s)		::	[] Single Phas	e; [] Three	Phase: [] Delta	[] Wye			
Power Dis	tribution S	ystem:	[] TN []TT	[]IT					
Location			Fault Condition 60990 clause		Touch current (mA)	Со	mment		
	EM			TE	9///				
Suppleme	ntary Infor	mation:							
			The state of the s				TATES		
						EW	*		
5.8	TABLE	Backfeed safe	guard in battery	backed up	supplies	N. S. or of Lines.	N/A		
Location		Supply Opvoltage (V)	perating and fault condition	Time (s)	Open-circuit voltage (V)	Touch current (A	ES Class		
CIA	1		-411	G					
Suppleme	ntary infor	mation:							
au.			CIL		CTAT	ESTING			

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

Abbreviation: SC= short circuit, OC= open circuit

6.2.2	TABLE: Power source	ce circuit classifica	tions	CTA		Р
Location	Operating and faul condition	t Voltage (V)	Current (A)	Max. Power ¹⁾ (W)	Time (S)	PS class
Input port	Normal operation					PS2
		NG				(declare)
USB output	Normal operation	4.99	2.62	13.15	3	PS1
USB output	R1 SC	5.02	0.5	2.51	3	PS1

Supplementary information:

Abbreviation: SC= short circuit; OC= open circuit

1) Measured after 3 s for PS1 and measured after 5 s for PS2 and PS3.

6.2.3.1	TABLE: Determi	nation of Arcing PIS			N/A				
Location		Open circuit voltage after 3 s (Vpk)	Measured r.m.s current (A)	Calculated value	Arcing PIS? Yes / No				
CIN		-551	No						
Supplement	Supplementary information:								
		(EVA)		TESI					

			CIL		_		
6.2.3.2	TABLE: Determination of resistive PIS						
Location		Operating and fault condition	Dissipate power (W)	Arcing PIS? Yes / No			
		NG.					
Supplement	ary information:						
Abbreviation	n: SC= short circuit	; OC= open circuit	TING				
	(CAI)	-17	E21.		C		

8.5.5	TABLE: High	pressure lamp	C		N/A
Lamp manu	ufacturer	Lamp type	Explosion method	Longest axis of glass particle (mm)	Particle found beyond 1 m Yes / No
Supplemen	tary information:	·	·		
CTA			TING		
		CTATES	(FAX.)	TATESTING	



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	a)G	IEC 62368-1		
Clause	Requirement + Test		Result - Remark	Verdict

ST.	CIA					.57	No				
	9.6	TABLE:	Tempera	ture measi	urem	ents	for wireles	s power t	ransmitter	s	N/A
	Supply volta	age (V)	V):						TES	Llla	_
	Max. transm	nit power of transmitter (W):						Stories (_		
	w/o recei direct c									iver and at e of 5 mm	
-55	Foreign o	bjects	Object (°C)	Ambient (°C)	-	ject C)	Ambient (°C)	Object (°C)	Ambient (°C)	Object (°C)	Ambient (°C)
CTATES				TING							
	Supplementary information:										
		orite ud	CIL	•	•		•	GTING		•	

5	.4.1.4,	TABLE: Tempe	rature mea	asurem	ents				Р	
	.3, B.1.5, 3.2.6									
S	Supply volta	age (V)		:	12	Vdc	-	The same of the sa	_	
Α	mbient ten	nperature during	test T _{amb} (°	C):	See	below	-		_	
٨	/laximum n	neasured tempera	ature <i>T</i> of p	art/at:		Т(°C)		Allowed T _{max} (°C)	
С	OC inlet			-17	32.8	47.8			Ref.	
P	PCB near U	J1		211	60.5	75.5		STINE	130	
C	241 body		Mary 1 Dane Amily		42.8	57.8	CTAN		105	
P	PCB near 3	U1			50.5	65.5			130	
F	Plastic encl	osure inside near	main boar	ď	40.9	55.9			Ref.	
Α	Ambient			25.0°C	Shift to 40°C			- Transmitte		
T	Touch Temperatures									
Е	nclosure o	outside near main	board		35.6		JG		77	
В	Button	CAN.			28.9	TEST			77	
S	Surface of t	he adapter			47.2	(P. '			77	
Α	Ambient				25.0°C				ATES.	
Т	emperatur	e T of winding:	t ₁ (°C)	R ₁ (Ω) t ₂ (°C	$R_2(\Omega)$	T (°C)	Allowed T _{max} (°C)	Insulation class	
		.6								
		ary information:								
South State of the	CTAT			TATE	STING			CTING		
							CTATE			



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

Note 1: Tma should be considered as directed by appliable requirement.

Note 2: Toch Temperatures, this is included in assessment of Toch Temperatures(Clause 9).

Note 3: The maximum ambient temperature specified by manufacturer is 40°C.

B.2.5		TABLE: Inpu	ıt test			25 11 11		Р		
U (V)	Hz	I (A)	I rated (A)	P (W)	P rated (W)	Fuse No	I fuse (A)	Condition/status		
12		0.752	1.0					Normal opeartion		
Supple	Supplementary information:									
GAN C'										

				Di . A				
B.3, B.4	TAB	LE: Abnormal	operating	and fault	condition t	ests	7	P
Ambient ten	npera	ture T _{amb} (°C)					23.8-24.5	
Power source	ce for	EUT: Manufact	urer, model	l/type, out	putrating:		_	
Component	No.	Condition	Supply voltage (V)	Test time	Fuse no.	Fuse current (A)	Observatio	n
Opening		Block	12Vdc	1hrs12 mins		Ca C	Normal operation, ndamage, no hazard max. Temperature: near U1: 69.4°C, Er outside near mian bd2.3°C, Ambient: 24	s, The PCB nclosure loard:
C25		SC	12Vdc	10mins			Unit shut down, recono damage, no haz	- C - C - C - C - C - C - C - C - C - C
C241		SC	12Vdc	10mins			Unit shut down, reco	25 1115 115

- 1. SC Short Circuit; OC Open Circuit; OL- Overload;
- 2. No ignition during and after all tests;
- 3. Output voltage comply with ES1 during and after all tests.
- 4. NB no indication of dielectric breakdown; NC Cheesecloth remained intact; NT Tissue paper remained intact.
- 5. Output circuit is under ES1 limit.

M.3 TABLE:	tection circuits for batteries provided within the equipment					
Is it possible to install th	ne battery in a reverse polarity position?:		_			
Equipment Specification	n Charging					
		CTATESIN				



	.s.G	IEC 62368-1		
Clause	Requirement + Test		Result - Remark	Verdict

	CTA			oT\\	NG				<u></u>	
			Voltage (V) Current (A)							
				, ·				STIN		
			Battery specification							
			Non-rechargeable batteries			Rec	hargeabl	TATES		
			Discharging	Unintentional	(Charging		Discharging		CIL
TATES	Manufacti	urer/type	current (A)	charging current (A)	Voltage	(V) Cur	rent (A)	current (A)	charging current (A)	
CIATE			ZING)						
	Note: The tes	ts of M.3.2 a	re applicable o	nly when abov	e appropri	ate data i	s not ava	ilable.		
	Specified battery temperature (°C)									
	Component No.	Fault condition	Charge/ discharge mo	Test time	Temp. (°C)	Current (A)	Voltage (V)	Obse	ervation	G
				No ventur					ATT	
	Supplementa	ry informatio	n:				•			
			circuit; OC= ope				je; NS= n	o spillage of	liquid; NE=	(

	M.4.2	TABLE: battery	Charging sa	feguards for	equipment co	ntaining a s	secondary lithium	N/A	
	Maximum specified charging voltage (V):								
	Maximum s	Maximum specified charging current (A):							
	Highest specified charging temperature (°C):								TES
	Lowest spe	cified cha	rging temperat	ure (°C)		· Proposition			CIA.
	Battery		Operating Measurement				Observation	n	
CTATES	manufacture	er/type	and fault condition	Charging voltage (V)	Charging current (A)	Temp. (°C)			
			TES			. C.			-
	Supplemen	tary inform	nation:						1

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

specified charging temperature

Q.1	TABLE: Circuits inte	nded for inte	rconnection	n with build	ing wiring	(LPS)	N/A
Output	Condition	11 ()()	Time (a)	I _{sc}	(A)	S ('	VA)
Circuit	Condition	U _{oc} (V)	Time (s)	Meas.	Limit	Meas.	Limit
CTA			STING				
NAME OF THE OWNER, WHEN THE OW		CTATE				NG	
				(Em)	CTATES	STILL	



	.NG	IEC 6236	68-1				
Clause	Requirement + Test			Result - Re	mark		Verdict
CTA		STIN	G				
NIN.		TATES				16	
Supplemer	ntary Information:						
		on the state of th		G.	(P)		

	T.2, T.3, T.4, T.5	TABLE	E: Steady force test					P
(ES	Location/Pa	art	Material	Thickness (mm)	Probe	Force (N)	Test Duration (s)	Observation
	Enclosure ⁻	Тор	Plastic	See 4.1.2	CTATE	250	5	Enclosure remained intact, no crack/opening developed.
	Enclosure S	Side	Plastic	See 4.1.2		250	5	Enclosure remained intact, no crack/opening developed.
	Enclosure I	Bottom	Plastic	See 4.1.2		250	5	Enclosure remained intact, no crack/opening developed.
	Supplemen	tary info	rmation:					
			(EM)				TEST	

	T.6, T.9	TABLE: Imp	act test		C. T.		Р
	Location/Pa	art	Material	Thickness (mm)	Height (mm)	Observation	n
TATES	Enclosure	Гор	Plastic	See 4.1.2	1300	Enclosure remaine no crack/opening d	
	Enclosure S	Side	Plastic	See 4.1.2	1300	Enclosure remaine no crack/opening d	
	Enclosure E	Bottom	Plastic	See 4.1.2	1300	Enclosure remaine no crack/opening d	
	Supplemen	tary information	n:				
						EW.	

T.7	TABLE: Dro	p test				N/A
Location/Part		Material	Thickness (mm)	Height (mm)	Observatio	n
112		CIATES			TING	
				CT CT	ATEST	



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

	- 10		
Clause	Requirement + Test	Result - Remark	Verdic
CTP		TING	
Suppleme	entary information:		
	Can Ch	ESTING	

L			70 000	and the same of th	111110	CIATE		
[-	T.8	TABLE	: Stress relief to	est	GIN			Р
	Location/Par	rt	Material	Thickness (mm)	Oven Temperature (°C)	Duration (h)	Obser	vation
TES	Enclosure		Plastic	See 4.1.2	70	7	Enclosure intact, no crack/oper developed	ning
;	Supplementa	ary inforr	nation:					
		The second		(0.11)	- CTA			-IN

Χ	TABLE: Altern	ative method for determining	minimum clearances	distances N/A
Clearance of between:	distanced	Peak of working voltage (V)	Required cl (mm)	Measured cl (mm)
Supplemen	tary information:			
CIL		ESTINO		
		CTA CTA	CTAT	ESTING
			Car C.	

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

S.C.	CTA		-7	ING		,	_
	4.1.2 TA	BLE: Critical comp	onents informati	on	-10	Р	
	Object / part No	. Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾	
TES	AC ADAPTOR	ShenZhen Mao TWo Power Co., Ltd	MR- FA017120010 0EU	Input: 100- 240Vac, 50/60Hz, 0.3A Output: 12Vdc, 1.0A	IEC/EN 62368-1	CE	CTA
TATL	РСВ	Interchangeable	Interchangeab le	V-0, 130 °C	UL 796, UL 94	UL	
	Plastic enclosure	SABIC INNOVATIVE PLASTICS B V	C6600(GG)(X) (VS)	V-0, 80°C, Thickness:1.5mm	UL94	UL E45329	1G
	Supplementary	information:					
	1) Provided evid	dence ensures the ag	reed level of com	pliance. See OD-CB	2039.	CAL	

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

ATTACHMENT TO TEST REPORT

IEC 62368-1

EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES

(AUDIO/VIDEO, INFORMATION AND COMMUNICATION TECHNOLOGY EQUIPMENT - PART 1: SAFETY REQUIREMENTS)

Differences according to...... EN IEC 62368-1:2020+A11:2020

Attachment Form No...... EU_GD_IEC62368_1E

Attachment Originator: UL(Demko)

Master Attachment 2021-02-04

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CENELEC COMMON MODIFICATIONS (EN) Clause numbers in the cells that are shaded light grey are clause references in EN IEC 62368-1:2020+A11:2020. All other clause numbers in that column, except for those in the paragraph below, refers to IEC 62368-1:2018. Clauses, subclauses, notes, tables, figures and annexes which are additional to those in IEC 62368-1:2018 are prefixed "Z". Add the following annexes: Annex ZA (normative) Normative references to international publications with their corresponding European publications Annex ZB (normative) Special national conditions Annex ZC (informative) A-deviations Annex ZD (informative) IEC and CENELEC code designations for flexible cords Modification to Clause 3. 3.3.19 Sound exposure Replace 3.3.19 of IEC 62368-1 with the following definitions:	~110
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1 Modification to Clause 3. 3.3.19 Sound exposure Replace 3.3.19 of IEC 62368-1 with the following definitions:	ı
3.3.19 Sound exposure Replace 3.3.19 of IEC 62368-1 with the following definitions:	
Replace 3.3.19 of IEC 62368-1 with the following definitions:	
TATES	N/A
CTATE	ı
CTA TESTING	
GIA CI	ESTIN



Clause	Requirement + Test	Result - Remark	Verdict
	(ES)		1 3.0.00
3.3.19.1	momentary exposure level, MEL		N/A
	metric for estimating 1 s sound exposure level from the HD 483-1 S2 test signal applied to both channels, based on EN 50332-1:2013, 4.2.	TESTING	
		CTA	
	Note 1 to entry: MEL is measured as A-weighted levels in dB.	G	ud
	Note 2 to entry: See B.3 of EN 50332-3:2017 for additional information.		CIR
3.3.19.3	sound exposure, E		N/A
	A-weighted sound pressure (<i>p</i>) squared and integrated over a stated period of time, <i>T</i>		
	Note 1 to entry: The SI unit is Pa ² s.	ETING	
	T		and the same
	$E = \int p(t)^2 \mathrm{d}t$		TESTIN
	0		TP
3.3.19.4	sound exposure level, <i>SEL</i>	CAL	N/A
	logarithmic measure of sound exposure relative to a reference value, <i>E</i> ₀ , typically the 1 kHz threshold of hearing in humans.		
CTA	Note 1 to entry: SEL is measured as A-weighted levels in dB.		
	$SEL = 10 \lg \left(\frac{E}{E_0}\right) dB$	CTATESTING	
	Note 2 to entry: See B.4 of EN 50332-3:2017 for additional information.		Can
3.3.19.5	digital signal level relative to full scale, dBFS		N/A
	levels reported in dBFS are always r.m.s. Full scale level, 0 dBFS, is the level of a dc-free 997-Hz sine wave whose undithered positive peak value is positive digital full scale, leaving the code corresponding to negative digital full scale unused	STING	
	Note 1 to entry: It is invalid to use dBFS for non-r.m.s. levels. Because the definition of full scale is based on a sine wave, the level of signals with a crest factor lower than that of a sine wave may exceed 0 dBFS. In particular, square wave signals may reach +3,01 dBFS.	G C	TATESTIN
2	Modification to Clause 10		
10.6	Safeguards against acoustic energy sources		N/A
	Replace 10.6 of IEC 62368-1 with the following:		
10.6.1.1	Introduction		N/A
	Safeguard requirements for protection against long-term exposure to excessive sound pressure levels from personal music players closely coupled	TESTING	
		CTA	



Clause	Requirement + Test	Result - Remark	Verdict
	TES!"		1
CTP	to the ear are specified below. Requirements for earphones and headphones intended for use with personal music players are also covered. A personal music player is a portable equipment intended for use by an ordinary person , that:	TATESTING	
	 is designed to allow the user to listen to audio or audiovisual content / material; and uses a listening device, such as headphones or earphones that can be worn in or on or around the ears; and 	CIP CIP	(en
TING	 has a player that can be body worn (of a size suitable to be carried in a clothing pocket) and is intended for the user to walk around with while in continuous use (for example, on a street, in a subway, at an airport, etc.). 	STING	
	EXAMPLES Portable CD players, MP3 audio players, mobile phones with MP3 type features, PDAs or similar equipment.		TESTIN
	Personal music players shall comply with the requirements of either 10.6.2 or 10.6.3.	CTA CT	ATESTIN
	NOTE 1 Protection against acoustic energy sources from telecom applications is referenced to ITU-T P.360.		
CTA	NOTE 2 It is the intention of the Committee to allow the alternative methods for now, but to only use the dose measurement method as given in 10.6.5 in future. Therefore, manufacturers are encouraged to implement 10.6.5 as soon as possible.	-ING	
	Listening devices sold separately shall comply with the requirements of 10.6.6. These requirements are valid for music or video mode only. The requirements do not apply to:	CTATES III	
TING	 professional equipment; NOTE 3 Professional equipment is equipment sold through special sales channels. All products sold through normal electronics stores are considered not to be professional 		Cin
	equipment. - hearing aid equipment and other devices for assistive listening;	ESTING	.01
	 the following type of analogue personal music players: long distance radio receiver (for example, a multiband radio receiver or world band radio receiver, an AM radio receiver), and cassette player/recorder; 	GIA CT	ATESTIN
	NOTE 4 This exemption has been allowed because this technology is falling out of use and it is expected that within a few years it will no longer exist. This exemption will not be extended to other technologies.		
	 a player while connected to an external amplifier that does not allow the user to walk around while in use. 	TESTING	
		CTA.	



	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
	LE3.		•
CTA	For equipment that is clearly designed or intended primarily for use by children, the limits of the relevant toy standards may apply.	TESTING	
	The relevant requirements are given in EN 71-1:2011, 4.20 and the related tests methods and measurement distances apply.	CTATES CTATES	
10.6.1.2	Non-ionizing radiation from radio frequencies in the range 0 to 300 GHz		N/A
	The amount of non-ionizing radiation is regulated by European Council Recommendation 1999/519/EC of 12 July 1999 on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz). For intentional radiators, ICNIRP guidelines should be taken into account for Limiting Exposure to Time-Varying Electric, Magnetic, and	STING CT	ATESTIN
	Electromagnetic Fields (up to 300 GHz). For handheld and body mounted devices, attention is drawn to EN 50360 and EN 50566.	CW CV	
10.6.2	Classification of devices without the capacity to	estimate sound dose	N/A
10.6.2.1	General		N/A
TING	This standard is transitioning from short-term based (30 s) requirements to long-term based (40 hour) requirements. These clauses remain in effect only for devices that do not comply with sound dose estimation as stipulated in EN 50332-3. For classifying the acoustic output $L_{\text{Aeq}, T}$, measurements are based on the A-weighted equivalent sound pressure level over a 30 s period. For music where the average sound pressure (long term $L_{\text{Aeq}, T}$) measured over the duration of the song is lower than the average produced by the	CTATES.	
	programme simulation noise, measurements may be done over the duration of the complete song. In this case, <i>T</i> becomes the duration of the song. NOTE Classical music, acoustic music and broadcast typically has an average sound pressure (long term $L_{Aeq,T}$) which is much lower than the average programme simulation noise. Therefore, if the player is capable to analyse the content and compare it with the programme simulation noise, the warning does not need to be given as long as the average sound pressure of the song does not exceed the required limit. For example, if the player is set with the programme simulation noise to 85 dB, but the average music level of the song is only 65 dB, there is no need to give a warning or ask an acknowledgement as long as the average sound level of the	STING CT	ATESTIN
40.000	song is not above the basic limit of 85 dB. RS1 limits (to be superseded, see 10.6.3.2)		NI/A
10.6.2.2	RS1 iimits (to be superseded, see 10.6.3.2) RS1 is a class 1 acoustic energy source that does	TESTING	N/A
		CIA CIA	



	IEC 62368-1	T	T
Clause	Requirement + Test	Result - Remark	Verdict
	E3.		
CIN	not exceed the following: — for equipment provided as a package (player with its listening device), and with a proprietary connector between the player and its listening device, or where the combination of player and listening device is known by other means such as setting or automatic detection, the LAeq, ⊤acoustic output shall be ≤ 85 dB when playing the fixed "programme simulation noise" described in EN	CTA TESTING	Cak
TING	50332-1. - for equipment provided with a standardized connector (for example, a 3,5 phone jack) that allows connection to a listening device for general use, the unweighted r.m.s. output voltage shall be ≤ 27 mV (analogue interface) or -25 dBFS (digital interface) when playing the fixed "programme simulation noise" described in EN 50332-1.	ESTING	
ı	- The RS1 limits will be updated for all devices as per 10.6.3.2.	4.0	TES !!
10.6.2.3	RS2 limits (to be superseded, see 10.6.3.3)	CTP	N/A
10.6.2.4	RS2 is a class 2 acoustic energy source that does not exceed the following: — for equipment provided as a package (player with its listening device), and with a proprietary connector between the player and its listening device, or when the combination of player and listening device is known by other means such as setting or automatic 130 detection, the LAeq, T acoustic output shall be ≤ 100 dB(A) when playing the fixed "programme simulation noise" as described in EN 50332-1. — for equipment provided with a standardized connector (for example, a 3,5 phone jack) that allows connection to a listening device for general use, the unweighted r.m.s. output voltage shall be ≤ 150 mV (analogue interface) or -10 dBFS (digital interface) when playing the fixed "programme simulation noise" as described in EN 50332-1. RS3 limits RS3 is a class 3 acoustic energy source that exceeds RS2 limits.	GTA TESTING	N/A
10.6.3	Classification of devices (new)	-<0	N/A
10.6.3.1	General Previous limits (10.6.2) created abundant false negative and false positive PMP sound level warnings. New limits, compliant with The Commission Decision of 23 June 2009, are given below.	CVF	N/A
10.6.3.2	RS1 limits (new) RS1 is a class 1 acoustic energy source that does not exceed the following:	CTATESTING	N/A

Clause	Requirement + Test	Result - Remark	Verdict
Clause	Requirement + rest	Result - Remark	verdict
-712	for an investment and ideal as a post-section of	1	1
C	- for equipment provided as a package (player		
	with its listening device), and with a proprietary		
	connector between the player and its listening	TING	
	device, or where the combination of player and	TES!	
	listening device is known by other means such as	CTATESTING	
	setting or automatic detection, the L_{Aeq} , τ acoustic output shall be ≤ 80 dB when playing the fixed	Carlo Circ	
	"programme simulation noise" described in EN		
	50332-1.		alica to
	 for equipment provided with a standardized 		G
	connector (for example, a 3,5 phone jack) that		25 usetus
	allows connection to a listening device for general		
	use, the unweighted r.m.s. output voltage shall be		
	≤ 15 mV (analogue interface) or -30 dBFS (digital		
	interface) when playing the fixed "programme	TING	
	simulation noise" described in EN 50332-1.	51	
10.6.3.3	RS2 limits (new)		N/A
	DOO is a sless O see all a see		EST 111
	RS2 is a class 2 acoustic energy source that does	_ ~1	771
	not exceed the following: – for equipment provided as a package (player with	CVI CT	
	its listening device), and with a proprietary		
	connector between the player and its listening	(2) (2)	
	device, or where the combination of player and		
	listening device is known by other means such as		
	setting or automatic detection, the weekly sound		
CIA	exposure level, as described in EN 50332-3, shall		
	be ≤ 80 dB when playing the fixed "programme		
	simulation noise" described in EN 50332-1.	CTATESTING	
	– for equipment provided with a standardized	TESI	
	connector (for example, a 3,5 phone jack) that allows connection to a listening device for general	CIA	
	use, the unweighted r.m.s. output level, integrated	CHANN THE PROPERTY OF THE PROP	
	over one week, as described in EN50332-3, shall		110
	be ≤ 15 mV (analogue interface) or -30 dBFS		
	(digital interface) when playing the fixed		
1111	"programme simulation noise" described in EN		
40.0.4	50332-1.		
10.6.4	Requirements for maximum sound exposure		N/A
10.6.4.1	Measurement methods	TING	N/A
	All valume controls shall be turned to maximum	51"	
	All volume controls shall be turned to maximum during tests.	1	_IN
	during tosts.		ESTIN
	Measurements shall be made in accordance with	CTP	1
	EN 50332-1 or EN 50332-2 as applicable.	Control Control	
10.6.4.2	Protection of persons		N/A
	E contract to the contract of		
	Except as given below, protection requirements for		
	parts accessible to ordinary persons, instructed		
	persons and skilled persons are given in 4.3.		
C	NOTE 1 Volume control is not considered a safeguard .		
	TES	164	
	Between RS2 and an ordinary person, the basic	ETING	
	safeguard may be replaced by an instructional	TE3.	





Clause	Requirement + Test	Result - Remark	Verdict
Ciause	Treduitettietit + 1620	INCOURT - MEIHAIK	verdict
CTA	safeguard in accordance with Clause F.5, except that the instructional safeguard shall be placed on the equipment, or on the packaging, or in the instruction manual. Alternatively, the instructional safeguard may be given through the equipment display during use.	CTATESTING	
NG.	The elements of the instructional safeguard shall be as follows:	Car	W VIA
TING	- element 1a: the symbol , IEC 60417-6044 (2011-01) - element 2: "High sound pressure" or equivalent		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
	wording – element 3: "Hearing damage risk" or equivalent wording	STING	10.
	 element 4: "Do not listen at high volume levels for long periods." or equivalent wording An equipment safeguard shall prevent exposure 	CTA CTA	TESTIN
-7 A	of an ordinary person to an RS2 source without intentional physical action from the ordinary person and shall automatically return to an output level not exceeding what is specified for an RS1 source when the power is switched off.		
CIT	The equipment shall provide a means to actively inform the user of the increased sound level when the equipment is operated with an output exceeding RS1. Any means used shall be acknowledged by the user before activating a mode of operation which allows for an output exceeding RS1. The acknowledgement does not need to be repeated more than once every 20 h of cumulative listening time.	CTATESTING	En
TING	NOTE 2 Examples of means include visual or audible signals. Action from the user is always needed.		
	NOTE 3 The 20 h listening time is the accumulative listening time, independent of how often and how long the personal music player has been switched off.	STING	
	A skilled person shall not be unintentionally exposed to RS3.		STIN
10.6.5	Requirements for dose-based systems	TA	N/A
10.6.5.1	General requirements	(ETA)	N/A
	Personal music players shall give the warnings as provided below when tested according to EN 50332-3, using the limits from this clause.		
CTA	The manufacturer may offer optional settings to allow the users to modify when and how they wish to receive the notifications and warnings to promote a better user experience without defeating the safeguards. This allows the users to be	STATESTING	
		CON UNITED STATES	

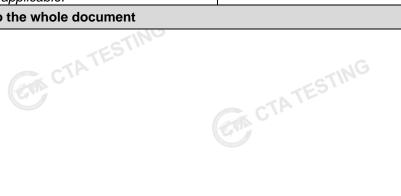


Clause	IEC 62368-1 Requirement + Test	Result - Remark	Verdict
Ciause	requirement + rest	Vezair - Velligik	verdict
CTA CTA	informed in a method that best meets their physical capabilities and device usage needs. If such optional settings are offered, an administrator (for example, parental restrictions, business/educational administrators, etc.) shall be able to lock any optional settings into a specific configuration.	CTATESTING	
TING	The personal music player shall be supplied with easy to understand explanation to the user of the dose management system, the risks involved, and how to use the system safely. The user shall be made aware that other sources may significantly contribute to their sound exposure, for example work, transportation, concerts, clubs, cinema, car races, etc.	STING	
10.6.5.2	Dose-based warning and requirements		N/A
	When a dose of 100 % <i>CSD</i> is reached, and at least at every 100 % further increase of <i>CSD</i> , the device shall warn the user and require an acknowledgement. In case the user does not acknowledge, the output level shall automatically decrease to compliance with class RS1.	GM CT	ATESTI
CTA.	The warning shall at least clearly indicate that listening above 100 % <i>CSD</i> leads to the risk of hearing damage or loss.		
10.6.5.3	Exposure-based requirements With only dose-based requirements, cause and effect could be far separated in time, defying the purpose of educating users about safe listening practice. In addition to dose-based requirements, a PMP shall therefore also put a limit to the short-term sound level a user can listen at.	CTATESTING	N/A
TING	The exposure-based limiter (EL) shall automatically reduce the sound level not to exceed 100 dB(A) or 150 mV integrated over the past 180 s, based on methodology defined in EN 50332-3. The EL settling time (time from starting level reduction to reaching target output) shall be 10 s or faster.	STING	TESTIN
CTA	Test of EL functionality is conducted according to EN 50332-3, using the limits from this clause. For equipment provided as a package (player with its listening device), the level integrated over 180 s shall be 100 dB or lower. For equipment provided with a standardized connector, the unweighted level integrated over 180 s shall be no more than 150 mV for an analogue interface and no more than -10 dBFS for a digital interface.	CT CT	ATESTIN
Don't Control	NOTE In case the source is known not to be music (or test signal), the EL may be disabled.	CTATESTING	
		Com C.	



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

	ING		
10.6.6	Requirements for listening devices (headphones	s, earphones, etc.)	N/A
10.6.6.1	Corded listening devices with analogue input	CTING	N/A
TING	With 94 dB LAeq acoustic pressure output of the listening device, and with the volume and sound settings in the listening device (for example, built-in volume level control, additional sound features like equalization, etc.) set to the combination of positions that maximize the measured acoustic output, the input voltage of the listening device when playing the fixed "programme simulation"	CTATES.	(en
	noise" as described in EN 50332-1 shall be ≥ 75 mV. NOTE The values of 94 dB and 75 mV correspond with 85 dB	STING	
10.6.6.2	and 27 mV or 100 dB and 150 mV. Corded listening devices with digital input		N/A
CTA	With any playing device playing the fixed "programme simulation noise" described in EN 50332-1, and with the volume and sound settings in the listening device (for example, built-in volume level control, additional sound features like equalization, etc.) set to the combination of positions that maximize the measured acoustic output, the $L_{Aeq, \tau}$ acoustic output of the listening device shall be \leq 100 dB with an input signal of -10	CT CT	ATEC
10.6.6.3	dBFS. Cordless listening devices	STING	21/2
10.6.6.3	In cordless mode, – with any playing and transmitting device playing the fixed programme simulation noise described in EN 50332-1; and – respecting the cordless transmission standards,	CTATES!	N/A
	where an air interface standard exists that specifies the equivalent acoustic level; and — with volume and sound settings in the receiving device (for example, built-in volume level control, additional sound features like equalization, etc.) set to the combination of positions that maximize the measured acoustic output for the above mentioned programme simulation noise, the LAeq, τ acoustic output of the listening device shall be ≤ 100 dB with	STING	ATESTIN
10.6.6.4	an input signal of -10 dBFS. Measurement method		N/A
	Measurements shall be made in accordance with EN 50332-2 as applicable.		IN/A
3	Modification to the whole document		
	CTATESTING		



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				IEC 62	2368-1		2000		
Clause	Red	quirement +	Test			Result - Rema	rk		Verdict
	TE	,							1
CIL	D elis		"country" note	es in the refe	erence docur	ment according	to the following	ıg	N/A
		0.2.1	Note 1 and 2	1	Note 4 and 5	3.3.8.1	Note 2	1	
		3.3.8.3	Note 1	4.1.15	Note	4.7.3	Note 1 and 2		
		5.2.2.2	Note	5.4.2.3.2.2 Table 12	Note c	5.4.2.3.2.4	Note 1 and 3		
TING		5.4.2.3.2.4	Note 2	5.4.2.5	Note 2	5.4.5.1	Note		The state of the s
		Table 13							
		5.4.10.2.1	Note	5.4.10.2.2	Note	5.4.10.2.3	Note		
	ACCOUNTY.	5.5.2.1	Note	5.5.6	Note	5.6.4.2.1	Note 2 and 3 and 4		CTIN
		5.6.8	Note 2	5.7.6	Note	5.7.7.1	Note 1 and Note 2	1	ES
		8.5.4.2.3	Note	10.2.1 Table 39	Note 3 and 4 and 5	10.5.3	Note 2		
CTA	TES	10.6.1	Note 3	F.3.3.6	Note 3	Y.4.1	Note		
CIA		Y.4.5	Note						
4	М	odification	to Clause 1	<u> </u>			<u> </u>		
1	A	dd the follow	ving note:			CIP			Р

NOTE Z1 The use of certain substances in electrical and electronic equipment is restricted within the EU: see Directive

2011/65/EU.

Modification to 4.Z1

CTATESTING

	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
4.Z1	Add the following new subclause after 4.9:		N/A
an)G	To protect against excessive current, short-circuits and earth faults in circuits connected to an a.c. mains, protective devices shall be included either as integral parts of the equipment or as parts of the building installation, subject to the following, a), b) and c): a) except as detailed in b) and c), protective devices necessary to comply with the requirements	GIN .	is Com
TING	of B.3.1 and B.4 shall be included as parts of the equipment; b) for components in series with the mains input to the equipment such as the supply cord, appliance coupler, r.f.i. filter and switch, short-circuit and earth fault protection may be provided by protective devices in the building installation;	ESTING	
	c) it is permitted for pluggable equipment type B or permanently connected equipment , to rely on dedicated overcurrent and short-circuit protection in the building installation, provided that the means of protection, e.g. fuses or circuit breakers, is fully specified in the installation instructions.	GIA (CTATESTIN
CTA	If reliance is placed on protection in the building installation, the installation instructions shall so state, except that for pluggable equipment type A the building installation shall be regarded as providing protection in accordance with the rating of the wall socket outlet.	STING	è
6	Modification to 5.4.2.3.2.4		
5.4.2.3.2.4	Add the following to the end of this subclause: The requirement for interconnection with external circuit is in addition given in EN 50491-3:2009.	CIN C	N/A
7	Modification to 10.2.1		
10.2.1	Add the following to c) and d) in table 39: For additional requirements, see 10.5.1.		N/A
8	Modification to 10.5.1		
	GT CTAT	Gas	CTATESTIN



	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
	163,		
10.5.1	Add the following after the first paragraph:		N/A
A TIME	For RS 1 compliance is checked by measurement under the following conditions:	CTATESTING	
TING	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.	CTA I	Em.
		ESTING	ATESTIN
- CTA	Moreover, the measurement shall be made under fault conditions causing an increase of the high voltage, provided an intelligible picture is maintained for 1 h, at the end of which the measurement is made.		
	For RS1, the dose-rate shall not exceed 1 µSv/h taking account of the background level. NOTE Z2 These values appear in Directive 96/29/Euratom of 13	3 CTATESTING	
9	May 1996.	CK U	
	Modification to G.7.1		
G.7.1	Add the following note: NOTE Z1 The harmonized code designations corresponding to	Added.	N/A
	the IEC cord types are given in Annex ZD.		
10	Modification to Bibliography		

10	Modification to Bibliog	ıraphy	
	CW CIA	CTA TESTING	TATESTING

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

CTA	Add the following notes for the standards indicated:	N/A
STING	IEC 60130-9	N/A
	IEC 61643-311 NOTE Harmonized as EN 61643-311. IEC 61643-321 NOTE Harmonized as EN 61643-321. IEC 61643-331 NOTE Harmonized as EN 61643-331.	ESTING
11	ADDITION OF ANNEXES	
ZB	ANNEX ZB, SPECIAL NATIONAL CONDITIONS (EN)	Р
	Denmark, Finland, Norway and Sweden	-
4.1.15	Definition, Finiand, Norway and Sweden	N/A
CTA '	To the end of the subclause the following is added: Class I pluggable equipment type A intended for connection to other equipment or a network shall, if safety relies on connection to reliable earthing or if surge suppressors are connected between the network terminals and accessible parts, have a marking stating that the equipment shall be connected to an earthed mains socket-outlet.	(Car.)
	The marking text in the applicable countries shall be as follows: In Denmark : "Apparatets stikprop skal tilsluttes en stikkontakt med jord som giver forbindelse til stikproppens jord." In Finland : "Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan" In Norway : "Apparatet må tilkoples jordet stikkontakt" In Sweden : "Apparaten skall anslutas till jordat uttag"	



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

4.7.3	United Kingdom		N/A
CALL	To the end of the subclause the following is added:	TING	
	The torque test is performed using a socket-outlet complying with BS 1363, and the plug part shall be assessed to the relevant clauses of BS 1363. Also see Annex G.4.2 of this annex	CTATES III	
5.2.2.2	Denmark Denmark		N/A
TING	After the 2nd paragraph add the following:		The state of the s
	A warning (marking safeguard) for high touch current is required if the touch current exceeds the limits of 3,5 mA a.c. or 10 mA d.c.	.NG	
5.4.11.1	Finland and Sweden	STING	N/A
and Annex G	To the end of the subclause the following is added:		ESTIN
	For separation of the telecommunication network from earth the following is applicable:	CTA CTA	
	If this insulation is solid, including insulation forming part of a component, it shall at least consist of either	12 ways.	
	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.	CTATESTING	
ring	If this insulation forms part of a semiconductor component (e.g. an optocoupler), there is no distance through insulation requirement for the insulation consisting of an insulating compound completely filling the casing, so that clearances and creepage distances do not exist, if the component passes the electric strength test in accordance with		(en
	 the compliance clause below and in addition passes the tests and inspection criteria of 5.4.8 with an electric strength test of 1,5 kV multiplied 	STING	
	by 1,6 (the electric strength test of 5.4.9 shall be performed using 1,5 kV),	CTA.	TESTIN
	and	CAN.	
	is subject to routine testing for electric strength during manufacturing, using a test voltage of 1,5 kV.		
CTA	It is permitted to bridge this insulation with a capacitor complying with EN 60384-14:2005, subclass Y2.	, NG	





	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
	7E5	1	
CTA	 A capacitor classified Y3 according to EN 60384-14:2005, may bridge this insulation under the following conditions: the insulation requirements are satisfied by having a capacitor classified Y3 as defined by EN 60384-14, which in addition to the Y3 testir is tested with an impulse test of 2,5 kV defined 5.4.11; 		
TING	the additional testing shall be performed on all the test specimens as described in EN 60384- 14;		
	the impulse test of 2,5 kV is to be performed before the endurance test in EN 60384-14, in the sequence of tests as described in EN 60384-14.	ESTIN	- 1
5.5.2.1	Norway		N/A
	After the 3rd paragraph the following is added:	CAN CT	N/A
	Due to the IT power system used, capacitors are required to be rated for the applicable line-to-line voltage (230 V).		
5.5.6	Finland, Norway and Sweden		N/A
	To the end of the subclause the following is added Resistors used as basic safeguard or bridging basic insulation in class I pluggable equipmen type A shall comply with G.10.1 and the test of G.10.2.	-ING	
5.6.1	Denmark	(CV)	N/A
TING	Add to the end of the subclause Due to many existing installations where the sock outlets can be protected with fuses with higher rating than the rating of the socket-outlets the protection for pluggable equipment type A shall be an integral part of the equipment. Justification:	et-	
	In Denmark an existing 13 A socket outlet can be protected by a 20 A fuse.	·	TESTIN
5.6.4.2.1	Ireland and United Kingdom	CTP	N/A
	After the indent for pluggable equipment type A the following is added: — the protective current rating is taken to be 13 this being the largest rating of fuse used in the mains plug.	25 0004	
CTA	CTA TESTING	CTATESTING	
		CONCTATES	



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

and the same of th	Aften the charles the release the control of the co		
	After the indent for pluggable equipment type A , the following is added: — in certain cases, the protective current rating of the circuit supplied from the mains is taken as 20 A instead of 16 A.	CTA TESTING	
5.6.5.1	To the second paragraph the following is added:	The second secon	N/A
TING	The range of conductor sizes of flexible cords to be accepted by terminals for equipment with a rated current over 10 A and up to and including 13 A is: 1,25 mm² to 1,5 mm² in cross-sectional area.		(CIP)
5.6.8	Norway	NG	N/A
	To the end of the subclause the following is added: Equipment connected with an earthed mains plug is classified as class I equipment . See the Norway marking requirement in 4.1.15. The symbol IEC 60417-6092, as specified in F.3.6.2, is accepted.	STING	ESTING
5.7.6	Denmark	(EM)	N/A
= CTAT	To the end of the subclause the following is added: The installation instruction shall be affixed to the equipment if the protective conductor current exceeds the limits of 3,5 mA a.c. or 10 mA d.c.		
5.7.6.2	Denmark		N/A
	To the end of the subclause the following is added: The warning (marking safeguard) for high touch current is required if the touch current or the protective current exceed the limits of 3,5 mA.	CTATESTING	
5.7.7.1	Norway and Sweden	222 2000	N/A
TING	To the end of the subclause the following is added: The screen of the television distribution system is normally not earthed at the entrance of the building and there is normally no equipotential bonding system within the building. Therefore the protective earthing of the building installation needs to be isolated from the screen of a cable distribution system. It is however accepted to provide the insulation	STING CTAT	ESTING
	external to the equipment by an adapter or an interconnection cable with galvanic isolator, which may be provided by a retailer, for example. The user manual shall then have the following or	GIN O	
CTAT	similar information in Norwegian and Swedish language respectively, depending on in what country the equipment is intended to be used in: "Apparatus connected to the protective earthing of	\G	
430011	the building installation through the mains	GTIN	



Clause	Requirement + Test	Result - Remark	Verdict
0.000	759	Troom Troman	7 0 7 0 1 0 1
CTA	connection or through other apparatus with a connection to protective earthing – and to a television distribution system using coaxia cable, may in some circumstances create a fire hazard. Connection to a television distribution system therefore has to be provided through a device providing electrical isolation below a certain frequency range (galvanic isolator, see EN 60728-11)"	CTA TESTING	
TING	NOTE In Norway, due to regulation for CATV-installations, and Sweden, a galvanic isolator shall provide electrical insulation below 5 MHz. The insulation shall withstand a dielectric strengtl of 1,5 kV r.m.s., 50 Hz or 60 Hz, for 1 min.		C
	Translation to Norwegian (the Swedish text will als be accepted in Norway):	ESTIN	
	"Apparater som er koplet til beskyttelsesjord via nettplugg og/eller via annet jordtilkoplet utstyr – og er tilkoplet et koaksialbasert kabel-TV nett, kan forårsake brannfare. For å unngå dette skal det ved tilkopling av apparater til kabel-TV nett installeres en galvanisk isolator mellom apparatet og kabel-TV nettet."	Com Co	ATESTIN
CTA	Translation to Swedish: "Apparater som är kopplad till skyddsjord via jordat vägguttag och/eller via annan utrustning och samtidigt är kopplad till kabel-TV nät kan i vissa fal medföra risk för brand. För att undvika detta skall vid anslutning av apparaten till kabel-TV nät galvanisk isolator finnas mellan apparaten och kabel-TV nätet.".	ING	
8.5.4.2.3	United Kingdom		N/A
TING	Add the following after the 2 nd dash bullet in 3 rd paragraph: An emergency stop system complying with the requirements of IEC 60204-1 and ISO 13850 is	TING	
B.3.1 and	required where there is a risk of personal injury. Ireland and United Kingdom	ED.,	NI/A
B.4	The following is applicable:	CIN CT	N/A
CTA	To protect against excessive currents and short-circuits in the primary circuit of direct plug-in equipment , tests according to Annexes B.3.1 and B.4 shall be conducted using an external miniature circuit breaker complying with EN 60898-1, Type B rated 32A. If the equipment does not pass these tests, suitable protective devices shall be included as an integral part of the direct plug-in equipmen until the requirements of Annexes B.3.1 and B.4 ar met	at, ee	
		CTATES!	
TING			



	IEC 623	68-1	
Clause	Requirement + Test	Result - Remark	Verdict

G.4.2	Denmark		N/A
2) 113 113 113	To the end of the subclause the following is added:	LING	
	Supply cords of single phase appliances having a rated current not exceeding 13 A shall be provided with a plug according to DS 60884-2-D1:2011.	CTA TESTING	
TING	CLASS I EQUIPMENT provided with socket-outlets with earth contacts or which are intended to be used in locations where protection against indirect contact is required according to the wiring rules shall be provided with a plug in accordance with standard sheet DK 2-1a or DK 2-5a.		EW.
	If a single-phase equipment having a RATED CURRENT exceeding 13 A or if a polyphase equipment is provided with a supply cord with a plug, this plug shall be in accordance with the standard sheets DK 6-1a in DS 60884-2-D1 or EN 60309-2.	STING	ESTIN
TAT	Mains socket outlets intended for providing power to Class II apparatus with a rated current of 2,5 A shall be in accordance DS 60884-2-D1:2011 standard sheet DKA 1-4a.	100 (2) (2) (2) (3) (3) (3) (3) (3) (3) (3) (3) (3) (3	
	Other current rating socket outlets shall be in compliance with Standard Sheet DKA 1-3a or DKA 1-1c.	TESTING	
	Mains socket-outlets with earth shall be in compliance with DS 60884-2-D1:2011 Standard Sheet DK 1-3a, DK 1-1c, DK1-1d, DK 1-5a or DK 1-7a	CTA.	
TING	Justification:		The second state of
	Heavy Current Regulations, Section 6c United Kingdom		
G.4.2	To the end of the subclause the following is added:	TING	N/A
	The plug part of direct plug-in equipment shall be assessed to BS 1363: Part 1, 12.1, 12.2, 12.3, 12.9, 12.11, 12.12, 12.13, 12.16, and 12.17, except that the test of 12.17 is performed at not less than	GM CTAT	ESTIN
	125 °C. Where the metal earth pin is replaced by an		



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

G.7.1	United Kingdom		N/A
213 40 547111	To the first paragraph the following is added:	CTATESTING	
	Equipment which is fitted with a flexible cable or	TESIN	
	cord and is designed to be connected to a mains	CIL	
	socket conforming to BS 1363 by means of that flexible cable or cord shall be fitted with a 'standard	C.	
	plug' in accordance with the Plugs and Sockets etc.		110 110
ING	(Safety) Regulations 1994, Statutory Instrument		23,000
1111	1994 No. 1768, unless exempted by those regulations.		
TING	regulations.		
	NOTE "Standard plug" is defined in SI 1768:1994 and essentially means an approved plug conforming to BS 1363 or	·C	
	an approved conversion plug.	TING	
G.7.1	Ireland		N/A
	To the first paragraph the following is added:	EM CTA	STIN
		CTA	TE
	Apparatus which is fitted with a flexible cable or cord shall be provided with a plug in accordance		
	with Statutory Instrument 525: 1997, "13 A Plugs	A Comment of the Comm	
	and Conversion Adapters for Domestic Use		
	Regulations: 1997. S.I. 525 provides for the recognition of a standard of another Member State		
-14	which is equivalent to the relevant Irish Standard		
G.7.2	Ireland and United Kingdom		N/A
23 was William	To the first paragraph the following is added:	TING	
	(ETA	TESTI	
	A power supply cord with a conductor of 1,25 mm ²	CTA	
	is allowed for equipment which is rated over 10 A and up to and including 13 A.	CITA	
	, , , , , , , , , , , , , , , , , , ,		C



		IEC 62368-1		
Clause	Requirement + Test		Result - Remark	Verdict
	TE3.			

ZC C	ANNEX ZC, NATIONAL DEVIATIONS (EN)			
10.5.2	Germany	- ING	N/A	
	The following requirement applies:	TESTIN		
TING	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.	CTA CTA	Gr.	7
	Justification: German ministerial decree against ionizing radiation (Röntgenverordnung), in force since 2002-07-01, implementing the European Directive 96/29/EURATOM.	STING	. (6	
	NOTE Contact address: Physikalisch-Technische Bundesanstalt, Bundesallee 100, D-38116 Braunschweig, Tel.: Int+49-531-592-6320, Internet: http://www.ptb.de	CTAT!	ESTING	

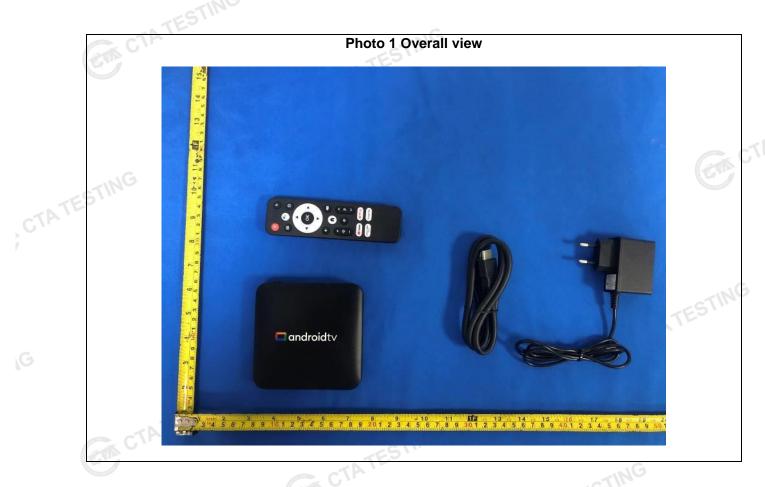




		IEC 62368-1		
Clause	Requirement + Test		Result - Remark	Verdict

Type of flexible cord Code designations		esignations	1 N/A
	IEC	CENELEC	-
PVC insulated cords			-
Flat twin tinsel cord	60227 IEC 41	H03VH-Y	
Light polyvinyl chloride sheathed flexible cord	60227 IEC 52	H03VV-F	CTAT
Ordinary polyvinyl chloride sheathed flexible cord	60227 IEC 53	H05VV-F H05VVH2-F	
Rubber insulated cords			1
Braided cord	60245 IEC 51	H03RT-F	
Ordinary tough rubber sheathed flexible cord	60245 IEC 53	H05RR-F	STING
Ordinary polychloroprene sheathed flexible cord	60245 IEC 57	H05RN-F	TES
Heavy polychloroprene sheathed flexible cord	60245 IEC 66	H07RN-F	
Cords having high flexibility	•		
Rubber insulated and sheathed cord	60245 IEC 86	H03RR-H	
Rubber insulated, crosslinked PVC sheathed cord	60245 IEC 87	ноз ₹∨4-н	
Crosslinked PVC insulated and sheathed cord	60245 IEC 88	H03V4V4-H	
Cords insulated and sheathed with halogen- free thermoplastic compounds			
Light halogen-free thermoplastic insulated and sheathed flexible cords		H03Z1Z1-F H03Z1Z1H2-F	CTAT!
Ordinary halogen-free thermoplastic insulated and		H05Z1Z1-F H05Z1Z1H2-F	(EM)
	PVC insulated cords Flat twin tinsel cord Light polyvinyl chloride sheathed flexible cord Ordinary polyvinyl chloride sheathed flexible cord Rubber insulated cords Braided cord Ordinary tough rubber sheathed flexible cord Ordinary polychloroprene sheathed flexible cord Heavy polychloroprene sheathed flexible cord Cords having high flexibility Rubber insulated and sheathed cord Rubber insulated, crosslinked PVC sheathed cord Crosslinked PVC insulated and sheathed cord Cords insulated and sheathed with halogen- free thermoplastic compounds Light halogen-free thermoplastic insulated and	PVC insulated cords Flat twin tinsel cord 60227 IEC 41 Light polyvinyl chloride sheathed flexible cord 60227 IEC 52 Ordinary polyvinyl chloride sheathed flexible cord 60227 IEC 53 Rubber insulated cords Braided cord 60245 IEC 51 Ordinary tough rubber sheathed flexible cord 60245 IEC 53 Ordinary polychloroprene sheathed flexible cord 60245 IEC 57 Heavy polychloroprene sheathed flexible cord 60245 IEC 66 Cords having high flexibility Rubber insulated and sheathed cord 60245 IEC 87 Crosslinked PVC insulated and sheathed cord 60245 IEC 87 Cords insulated and sheathed with halogen-free thermoplastic compounds Light halogen-free thermoplastic insulated and	PVC insulated cords Flat twin tinsel cord 60227 IEC 41 H03VH-Y Light polyvinyl chloride sheathed flexible cord 60227 IEC 52 H03VV-F H03VV-F H05VV-F H05RN-F Ordinary tough rubber sheathed flexible cord 60245 IEC 53 H05RR-F Heavy polychloroprene sheathed flexible cord 60245 IEC 68 H07RN-F Cords having high flexibility Rubber insulated and sheathed cord 60245 IEC 86 H03RR-H Rubber insulated, crosslinked PVC sheathed cord 60245 IEC 87 H03RV4-H Crosslinked PVC insulated and sheathed cord 60245 IEC 88 H03V4V4-H Cords insulated and sheathed with halogen- free thermoplastic compounds Light halogen-free thermoplastic insulated and





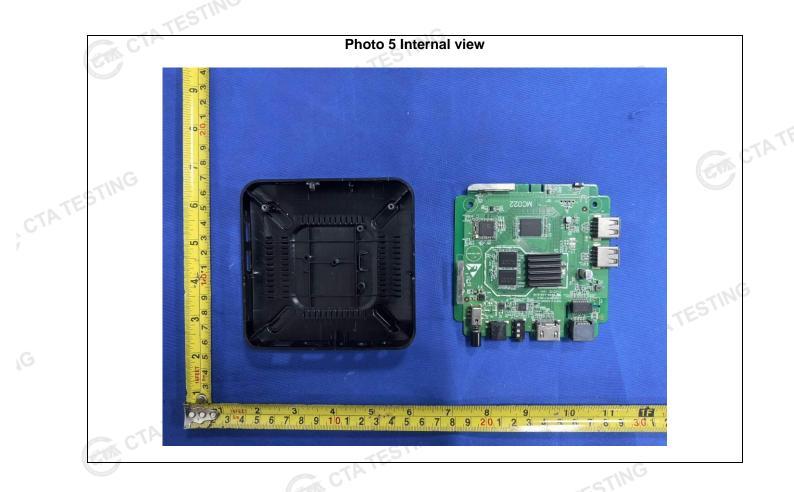


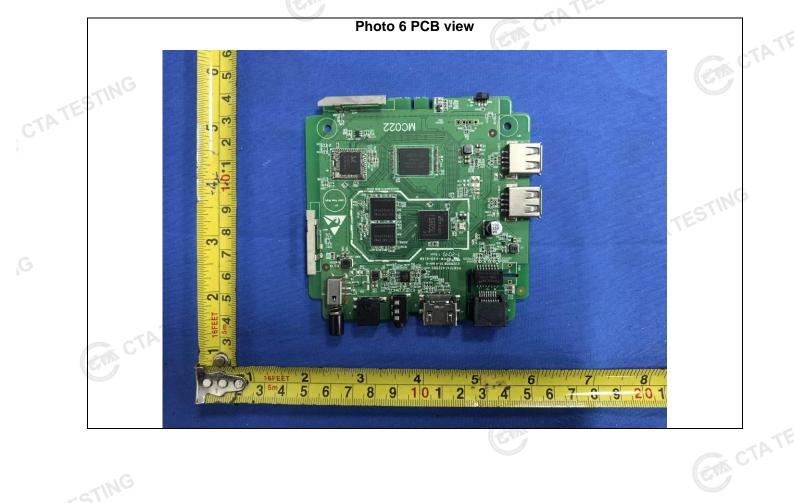




















CERTIFICATE OF COMPLIANCE

Directives: 2014/53/EU

Certification number: CTE250418007

Issued date: Apr. 28, 2025

Applicant: Shenzhen Haochuangyi Technology Co.,Ltd

1101, Building 6, Changyi Industrial Plant, No.1 Lirong Road, Xinshi Community,

Dalang Street, Longhua District, Shenzhen, China

Manufacturer: Shenzhen Haochuangyi Technology Co.,Ltd

1101, Building 6, Changyi Industrial Plant, No.1 Lirong Road, Xinshi Community,

Dalang Street, Longhua District, Shenzhen, China

EUT Name: H96Max S905L3

Trade Mark: H96 Max

Model number: H96Max S905L3

Laboratory: Shenzhen CTA Testing Technology Co., Ltd.

Room 106, Building 1, Yibaolai Industrial Park, Qiaotou Community, Fuhai Street,

Bao'an District, Shenzhen, China

The equipment, as described herewith, was tested pursuant to applicable test procedure and complies with the requirements of Applicable Directives: 2014/53/EU RED DIRECTIVE:

Requirement	Applied Standards	Test Report No.	Result
D-di-	ETOLEN 000 000 \/0 0.0 \/0040 07\	CTA25041800701	0
Radio	ETSI EN 300 328 V2.2.2 (2019-07)	CTA25041800702	Conform
	ETSI EN 301 489-1 V2.2.3 (2019-11)	∀ >	
	ETSI EN 301 489-17 V3.3.1 (2024-09)		
EMC	EN 55032:2015+A11:2020/EN 55035:2017+A11:2020	CTA25041800703	Conform
	EN IEC 61000-3-2:2019/A2:2024		
	EN 61000-3-3:2013/A2:2021/AC:2022		
Health	EN IEC 62311:2020	CTA25041800704	Conform
Safety	EN IEC 62368-1:2020+A11:2020	CTA25041800705	Conform

The test results are traceable to the international or national standards.



Note: The verification is only valid for the equipment and configuration described, in conjunction with the test data detailed above. The CE mark as shown beside can be used, under the responsibility of the manufacturer, after completion of an EC Directive of Conformity and compliance with all relevant EC Directive.

Authorized by:

Shenzhen CTA Testing Technology Co., Ltd.

Room 106, Building 1, Yibaolai Industrial Park, Qiaotou Community, Fuhai Street, Bao'an District, Shenzhen, China

Tel:+86-755 2322 5875 E-mail:cta@cta-test.cn Web:http://www.cta-test.cn



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Test Report

Applicant : Shenzhen Haochuangyi Technology Co.,Ltd

Address : 1101, Building 6, Changyi Industrial Plant, No.1 Lirong Road, Xinshi

Community, Dalang Street, Longhua District, Shenzhen, China

Manufacturer : Shenzhen Haochuangyi Technology Co.,Ltd

1101, Building 6, Changyi Industrial Plant, No.1 Lirong Road, Xinshi

Community, Dalang Street, Longhua District, Shenzhen, China

Report on the submitted samples said to be:

Sample Name(s) : H96Max S905L3

Trade Mark : H96 Max

Model : H96Max S905L3

Series model : N/A

Description of

Address

differences

: N/A

Sample Received Date : Feb.17, 2025

Testing Period : Feb.17, 2025~ Apr.28, 2025

Date of Report : Apr.28, 2025

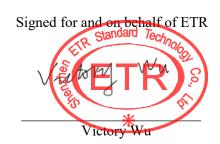
Test Location : No.103, No.10, Phase I, Zone 3, Xinxing Industrial Park, Xinhe, Fuhai

Street, Bao'an District, Shenzhen, Guangdong, China

Testing Laboratory : Shenzhen ETR Standard Technology Co., Ltd

Results : Please refer to next page(s).

TEST REQUEST	CONCLUSION
As specified by client, based on the performed tests on submitted sample, the result of	
Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), PBBs, PBDEs,	
Dibutyl Phthalate(DBP), Butylbenzyl Phthalate(BBP), Di-2-ethylhexyl	PASS
Phthalate(DEHP) and Diisobutyl phthalate(DIBP) content comply with the limits set by	
RoHS Directive 2011/65/EU with amendment (EU) 2015/863.	





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A. EU RoHS Directive 2011/65/EU and its amendment directives

Test method: Refer to IEC 62321-1:2013&IEC 62321-2:2021&IEC 62321-3-1:2013, Screening by X-ray Fluorescence Spectroscopy (XRF).

Test result(s):

Sample No.	Sample		Screening Result(s)				
	Description	Cd	Pb	Hg	Cr♥	Br▼	
1	Black Label	BL	BL	BL	BL	BL	
2	Black plastic	BL	BL	BL	BL	BL	
3	Black plastic	BL	BL	BL	BL	BL	
4	Silver metal	BL	BL	BL	BL	N/A	
5	Black plastic	BL	BL	BL	BL	BL	
6	Black plastic	BL	BL	BL	BL	BL	
7	Silver metal needle	BL	BL	BL	BL	N/A	
8	Silver metal	BL	BL	BL	BL	N/A	
9	Black plastic	BL	BL	BL	BL	BL	
10	Silver metal	BL	BL	BL	BL	N/A	
11	Silver metal needle	BL	BL	BL	BL	N/A	
12	Black plastic	BL	BL	BL	BL	BL	
13	Silver metal	BL	BL	BL	BL	N/A	
14	Black metal gasket	BL	BL	BL	BL	N/A	
15	Surface mount capacitor	BL	BL	BL	BL	BL	
16	chip resistor	BL	BL	BL	BL	BL	
17	Black IC	BL	BL	BL	BL	BL	
18	PCB	BL	BL	BL	BL	BL	
19	tin solder	BL	BL	BL	BL	N/A	
20	Silver metal	BL	BL	BL	BL	N/A	
21	Black plastic	BL	BL	BL	BL	BL	
22	Copper colored metal needle	BL	BL	BL	BL	N/A	
23	Black plastic	BL	BL	BL	BL	BL	
24	Black plastic wire cover	BL	BL	BL	BL	BL	
25	Silver metal wire	BL	BL	BL	BL	N/A	
26	Silver metal foil	BL	BL	BL	BL	N/A	
27	Light blue metal foil	BL	BL	BL	BL	N/A	
28	Transparent plastic	BL	BL	BL	BL	BL	
29	White plastic	BL	BL	BL	BL	BL	
30	Copper colored metal wire	BL	BL	BL	BL	N/A	
31	Purple plastic wire sheath	BL	BL	BL	BL	BL	



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Sample	Sample		Sc	reening Result	t(s)	
No.	Description	Cd	Pb	Hg	Cr▼	Br▼
32	Grey plastic wire cover	BL	BL	BL	BL	BL
33	White plastic wire cover	BL	BL	BL	BL	BL
34	Red plastic wire cover	BL	BL	BL	BL	BL
35	Silver metal	BL	BL	BL	BL	N/A
36	Black plastic	BL	BL	BL	BL	BL
37	Green plastic	BL	BL	BL	BL	BL
38	Silver metal	BL	BL	BL	BL	N/A
39	Black gasket	BL	BL	BL	BL	BL
40	Silver metal needle	BL	BL	BL	BL	N/A
41	Dark yellow plastic	BL	BL	BL	BL	BL
42	Dark yellow plastic	BL	BL	BL	BL	BL
43	Silver metal	BL	BL	BL	BL	N/A
44	Silver metal	BL	BL	BL	BL	N/A
45	Black plastic	BL	BL	BL	BL	BL
46	Silver metal	BL	BL	BL	BL	N/A
47	Black gasket	BL	BL	BL	BL	BL
48	Silver metal needle	BL	BL	BL	BL	N/A
49	Dark yellow plastic	BL	BL	BL	BL	BL
50	Dark yellow plastic	BL	BL	BL	BL	BL
51	Silver metal	BL	BL	BL	BL	N/A
52	Silver metal	BL	BL	BL	BL	N/A
53	Yellow plastic	BL	BL	BL	BL	BL
54	Black plastic	BL	BL	BL	BL	BL
55	ferrous metal	BL	BL	BL	BL	N/A
56	Copper colored metal wire	BL	BL	BL	BL	N/A
57	Silver metal	BL	BL	BL	BL	N/A
58	Surface mount capacitor	BL	BL	BL	BL	BL
59	chip resistor	BL	BL	BL	BL	BL
60	Black IC	BL	BL	BL	BL	BL
61	tin solder	BL	BL	BL	BL	N/A
62	PCB	BL	BL	BL	BL	BL
63	Black plastic wire cover	BL	BL	BL	BL	BL
64	Red plastic wire cover	BL	BL	BL	BL	BL
65	Green plastic wire cover	BL	BL	BL	BL	BL
66	Copper colored metal wire	BL	BL	BL	BL	N/A



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Sample	Sampla		Sc	reening Result	(s)	
Sample No.	Sample Description	Cd	Pb	Hg	Cr♥	Br▼
67	Red plastic button	BL	BL	BL	BL	BL
68	White plastic button	BL	BL	BL	BL	BL
69	Black plastic button	BL	BL	BL	BL	BL
70	Black plastic	BL	BL	BL	BL	BL
71	Silver metal	BL	BL	BL	BL	N/A
72	Transparent plastic	BL	BL	BL	BL	BL
73	Silver metal	BL	BL	BL	BL	N/A
74	Surface mount capacitor	BL	BL	BL	BL	BL
75	chip resistor	BL	BL	BL	BL	BL
76	Black IC	BL	BL	BL	BL	BL
77	tin solder	BL	BL	BL	BL	N/A
78	PCB	BL	BL	BL	BL	BL

Note:

1. Results were obtained by XRF for primary screening, and further chemical testing by ICP(for Cd, Pb, Hg), UV-Vis(for Cr(VI)) and GC-MS(for PBBs, PBDEs) are recommended to be performed, if the concentration exceeds the below warning value according to IEC 62321-3-1:2013(Unit: mg/kg).

Element	Polymers	Metals	Composite material
Cd	BL≤(70-3σ) <x<(130+3σ)≤ol< td=""><td>BL≤(70-3σ)<x<(130+3σ)≤ol< td=""><td>LOD<x<(150+3σ)≤ol< td=""></x<(150+3σ)≤ol<></td></x<(130+3σ)≤ol<></td></x<(130+3σ)≤ol<>	BL≤(70-3σ) <x<(130+3σ)≤ol< td=""><td>LOD<x<(150+3σ)≤ol< td=""></x<(150+3σ)≤ol<></td></x<(130+3σ)≤ol<>	LOD <x<(150+3σ)≤ol< td=""></x<(150+3σ)≤ol<>
Pb	BL≤(700-3σ) <x<(1300+3σ)≤ol< td=""><td>BL≤(700-3σ)<x<(1300+3σ)≤ol< td=""><td>BL≤(500-3σ)<x<(1500+3σ)≤ol< td=""></x<(1500+3σ)≤ol<></td></x<(1300+3σ)≤ol<></td></x<(1300+3σ)≤ol<>	BL≤(700-3σ) <x<(1300+3σ)≤ol< td=""><td>BL≤(500-3σ)<x<(1500+3σ)≤ol< td=""></x<(1500+3σ)≤ol<></td></x<(1300+3σ)≤ol<>	BL≤(500-3σ) <x<(1500+3σ)≤ol< td=""></x<(1500+3σ)≤ol<>
Hg	BL≤(700-3σ) <x<(1300+3σ)≤ol< td=""><td>BL≤(700-3σ)<x<(1300+3σ)≤ol< td=""><td>BL≤(500-3σ)<x<(1500+3σ)≤ol< td=""></x<(1500+3σ)≤ol<></td></x<(1300+3σ)≤ol<></td></x<(1300+3σ)≤ol<>	BL≤(700-3σ) <x<(1300+3σ)≤ol< td=""><td>BL≤(500-3σ)<x<(1500+3σ)≤ol< td=""></x<(1500+3σ)≤ol<></td></x<(1300+3σ)≤ol<>	BL≤(500-3σ) <x<(1500+3σ)≤ol< td=""></x<(1500+3σ)≤ol<>
Cr	BL≤(700-3σ) <x< td=""><td>BL≤(700-3σ)<x< td=""><td>BL≤(500-3σ)<x< td=""></x<></td></x<></td></x<>	BL≤(700-3σ) <x< td=""><td>BL≤(500-3σ)<x< td=""></x<></td></x<>	BL≤(500-3σ) <x< td=""></x<>
Br	BL≤(300-3σ) <x< td=""><td>N/A</td><td>BL≤(250-3σ)<x< td=""></x<></td></x<>	N/A	BL≤(250-3σ) <x< td=""></x<>

Remark:

- BL= Below Limit
- OL= Over Limit
- X= The range of needing to do further testing
- 3σ = The reproducibility of analytical instruments
- N/A= Not applicable
- LOD= Detection limit
- 2. The XRF screening test for RoHS elements The reading may be different to the actual content in the sample be of non-uniformity composition.
- 3. The maximum permissible limit is quoted from the document RoHS Directive 2011/65/EU with amendment (EU) 2015/863.
- 4. ▼=For restricted substances PBBs and PBDEs, the results show the total Br content, the restricted substance was Cr(VI), and the results showed the total Cr content.

RoHS Restricted Substances	Maximum Concentration Value (mg/kg) (by weight in homogenous materials)



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Cadmium(Cd)		100
Lead(Pb)		1000
Mercury(Hg)		1000
Hexavalent Chromium(Cr(VI))		1000
Polybrominated biphenyls(PBBs)		1000
Polybrominated diphenylethers(PBDEs)		1000
Dibutyl Phthalate(DBP)		1000
Butylbenzyl Phthalate(BBP)		1000
Di-(2-ethylhexyl) Phthalate(DEHP)		1000
Diisobutyl phthalate(DIBP)		1000

Disclaimers:

This XRF Screening report is for reference purposes only. The applicant shall make its/his/her own judgment as to whether the information provided in this XRF screening report is sufficient for its/his/her purposes. The result shown in this XRF screening report will differ based on various factors, including but not limited to, the sample size, thickness, area, surface flatness, equipment parameters and matrix effect (e.g. plastic, rubber, metal, glass, ceramic etc.). Further wet chemical pre-treatment with relevant chemical equipment analysis are required to obtain quantitative data.

B. EU RoHS Directive 2011/65/EU with amendment (EU) 2015/863 on Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), PBBs, PBDEs, DBP, BBP, DEHP & DIBP content

Test method:

Lead(Pb) & Cadmium(Cd) Content:

Refer to IEC 62321-5:2013, by acid digestion and analysis was performed by inductively coupled plasma optical emission spectrometer (ICP-OES) or atomic absorption spectrometer (AAS).

Mercury(Hg) Content:

Refer to IEC 62321-4:2013+AMD1:2017 CSV, by acid digestion and analysis was performed by inductively coupled plasma optical emission spectrometer (ICP-OES).

Hexavalent Chromium(Cr(VI)) Content:

Refer to IEC 62321-7-1:2015 or IEC 62321-7-2:2017, analysis was performed by UV-visible spectrophotometer (UV-Vis).

PBBs & PBDEs Content:

Refer to IEC 62321-6:2015, by solvent extraction and analysis was performed by gas chromatography-mass spectrometer (GC-MS).

Phthalates(DBP, BBP, DEHP &DIBP) Content:

Refer to IEC 62321-8:2017, by solvent extraction and analysis was performed by gas chromatography-mass spectrometer (GC-MS).

Test result(s):

1) Phthalates(DBP, BBP, DEHP &DIBP)

Tested Item(s)	MDL (mg/kg)	Test Result(s) (mg/kg) 1+2+3+5	Limit (mg/kg)
Dibutyl Phthalate(DBP) Content	50	N.D.	1000



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Butylbenzyl Phthalate(BBP) Content	50	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP) Content	50	N.D.	1000
Diisobutyl phthalate(DIBP) Content	50	N.D.	1000

Tested Item(s)	MDL (mg/kg)	Test Result(s) (mg/kg) 6+9+12+15	Limit (mg/kg)
Dibutyl Phthalate(DBP) Content	50	N.D.	1000
Butylbenzyl Phthalate(BBP) Content	50	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP) Content	50	N.D.	1000
Diisobutyl phthalate(DIBP) Content	50	N.D.	1000

Tested Item(s)	MDL (mg/kg)	Test Result(s) (mg/kg) 16+17+18+21	Limit (mg/kg)
Dibutyl Phthalate(DBP) Content	50	N.D.	1000
Butylbenzyl Phthalate(BBP) Content	50	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP) Content	50	N.D.	1000
Diisobutyl phthalate(DIBP) Content	50	N.D.	1000

Tested Item(s)	MDL (mg/kg)	Test Result(s) (mg/kg) 23+24+28+29	Limit (mg/kg)
Dibutyl Phthalate(DBP) Content	50	N.D.	1000
Butylbenzyl Phthalate(BBP) Content	50	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP) Content	50	N.D.	1000
Diisobutyl phthalate(DIBP) Content	50	N.D.	1000

Tested Item(s)	MDL (mg/kg)	Test Result(s) (mg/kg) 31+32+33+34	Limit (mg/kg)
Dibutyl Phthalate(DBP) Content	50	N.D.	1000



	Page 7 of	17 Report No: ET-25	5020243C-1
Butylbenzyl Phthalate(BBP) Content	50	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP) Content	50	N.D.	1000
Diisobutyl phthalate(DIBP) Content	50	N.D.	1000

Tested Item(s)	MDL (mg/kg)	Test Result(s) (mg/kg) 36+37+39+41	Limit (mg/kg)
Dibutyl Phthalate(DBP) Content	50	N.D.	1000
Butylbenzyl Phthalate(BBP) Content	50	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP) Content	50	N.D.	1000
Diisobutyl phthalate(DIBP) Content	50	N.D.	1000

Tested Item(s)	MDL	Test Result(s) (mg/kg)	Limit
,	(mg/kg)	42+45+47+49	(mg/kg)
Dibutyl Phthalate(DBP) Content	50	N.D.	1000
Butylbenzyl Phthalate(BBP) Content	50	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP) Content	50	N.D.	1000
Diisobutyl phthalate(DIBP) Content	50	N.D.	1000

Tested Item(s)	MDL (mg/kg)	Test Result(s) (mg/kg) 50+53+54+58	Limit (mg/kg)
Dibutyl Phthalate(DBP) Content	50	N.D.	1000
Butylbenzyl Phthalate(BBP) Content	50	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP) Content	50	N.D.	1000
Diisobutyl phthalate(DIBP) Content	50	N.D.	1000

Tested Item(s)	MDL (mg/kg)	Test Result(s) (mg/kg) 59+60+62+63	Limit (mg/kg)
Dibutyl Phthalate(DBP) Content	50	N.D.	1000
Butylbenzyl Phthalate(BBP) Content	50	N.D.	1000



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Di-(2-ethylhexyl) Phthalate(DEHP) Content	50	N.D.	1000
Diisobutyl phthalate(DIBP) Content	50	N.D.	1000

Tested Item(s)	MDL (mg/kg)	Test Result(s) (mg/kg) 64+65+67+68	Limit (mg/kg)
Dibutyl Phthalate(DBP) Content	50	N.D.	1000
Butylbenzyl Phthalate(BBP) Content	50	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP) Content	50	N.D.	1000
Diisobutyl phthalate(DIBP) Content	50	N.D.	1000

Tested Item(s)	MDL (mg/kg)	Test Result(s) (mg/kg) 69+70+72+74	Limit (mg/kg)
Dibutyl Phthalate(DBP) Content	50	N.D.	1000
Butylbenzyl Phthalate(BBP) Content	50	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP) Content	50	N.D.	1000
Diisobutyl phthalate(DIBP) Content	50	N.D.	1000

Tested Item(s)	MDL (mg/kg)	Test Result(s) (mg/kg) 75+76+78	Limit (mg/kg)
Dibutyl Phthalate(DBP) Content	50	N.D.	1000
Butylbenzyl Phthalate(BBP) Content	50	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP) Content	50	N.D.	1000
Diisobutyl phthalate(DIBP) Content	50	N.D.	1000



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Note:

- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL or LOQ)
- mg= milligram
- LOQ = Limit Of Quantification, The LOQ of Hexavalent chromium is 0.10 μg/cm2
- \star = a. The sample is positive for Cr(VI) if the Cr(VI) concentration is greater than 0.13μg/cm2. The sample coating is considered to contain Cr(VI).
 - b. The sample is negative for Cr(VI) if Cr(VI) is N.D.(concentration less than $0.10\mu g/cm2$). The sample coating is considered a non- Cr(VI) based coating.
 - c. The result between $0.10\mu g/cm2$ and $0.13\mu g/cm2$ is considered to be inconclusive, unavoidable coating variations may influence the determination.
- Information on storage conditions and production date of the tested samples is unavailable and thus Cr(VI) results represent status of the sample at the time of testing.
- According to customer's requirement, only the appointed materials have been tested.
- #1 According to RoHS Directive 2011/65/EU and its amendments, Lead is exempted as an alloying element in Copper containing up to 4% (40000ppm) by weight.
- #2 According to RoHS Directive 2011/65/EU and its amendments, Lead is exempted in glass of cathode ray tubes, electronic components and fluorescent tubes.
- #3 According to RoHS Directive 2011/65/EU and its amendments, Lead is exempted in electronic ceramic parts (e.g. piezoelectronic devices).
- #4 According to RoHS Directive 2011/65/EU and its amendments, Lead is exempted in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead).
- #5 According to RoHS Directive 2011/65/EU and its amendments, Lead is exempted as an alloying element in Aluminum containing up to 0.4% (4000ppm) by weight.
- #6 According to RoHS Directive 2011/65/EU and its amendments, Cadmium and its compounds in electrical contact are exempted.
- #7 According to RoHS Directive 2011/65/EU and its amendments, Lead is exempted in steel for machining purposes and in galvanised steel containing up to 0.35% (3500ppm) by weight.

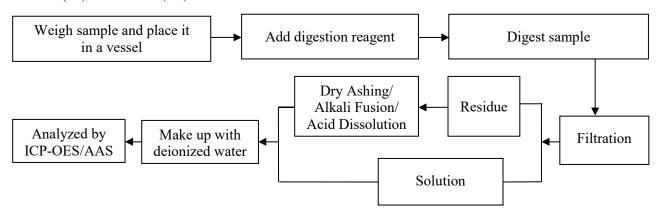


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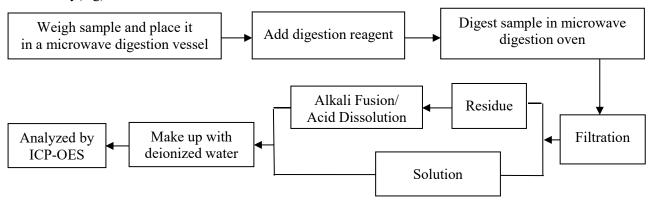
Report No: ET-25020243C-1

Test Process

1. Lead(Pb) & Cadmium(Cd): IEC 62321-5:2013

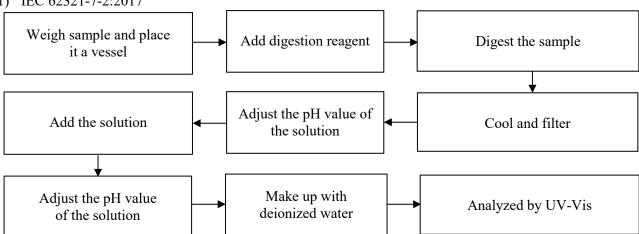


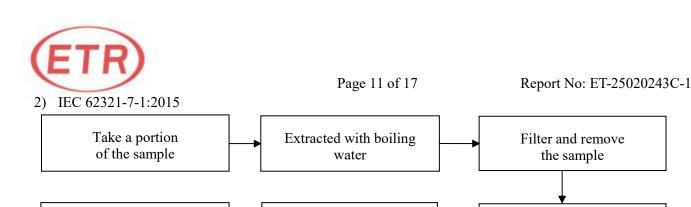
2. Mercury(Hg): IEC 62321-4:2013+AMD1:2017 CSV



3. Hexavalent Chromium(Cr(VI))

1) IEC 62321-7-2:2017



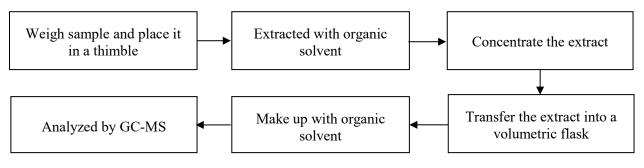


4. Polybrominated Biphenyls(PBBs) & Polybrominated Diphenyl Ethers(PBDEs): IEC 62321-6:2015

Add test solution

Adjust the pH value

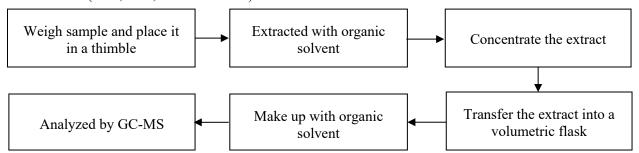
of the solution



5. Phthalates(DBP, BBP, DEHP & DIBP) : IEC 62321-8:2017

Analyzed by

UV-Vis



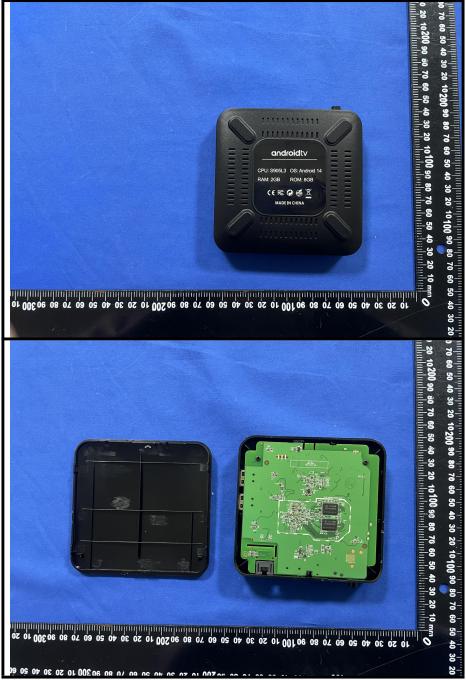


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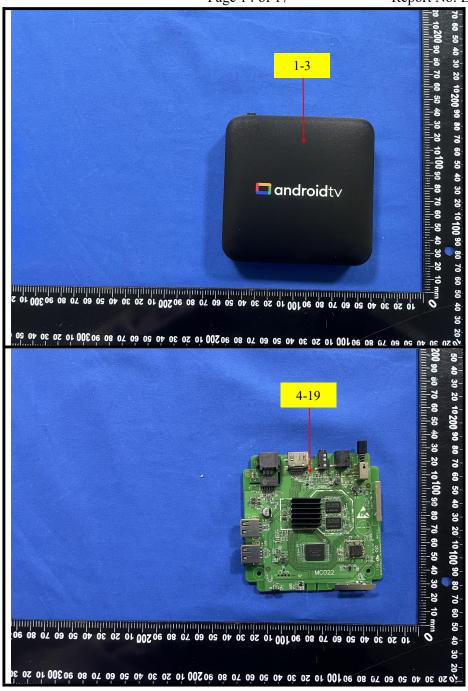
The photo(s) of the sample



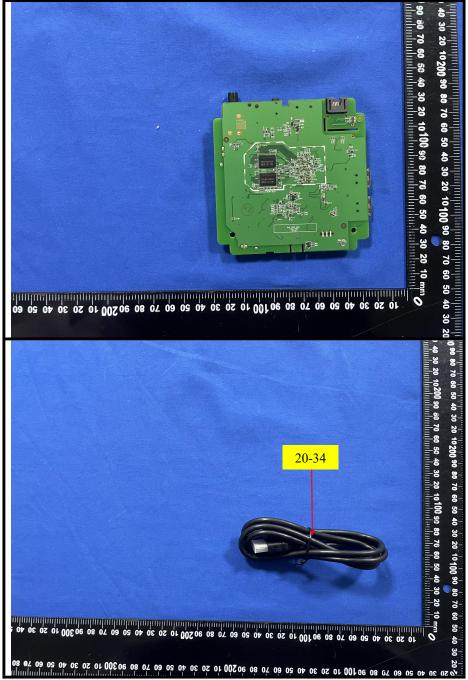


















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- The test report is invalid without the signature of the approver and the special seal for the company's report;
- The company name, address and sample information shown on the report were provided by the applicant who should be responsible for the authenticity which are not verified by ETR;
- The test results in this report are only responsible for the tested samples;
- Without written approval of ETR, this report can't be reproduced except in full; 4.
- In case of any discrepancy between the corresponding Chinese and English contents in the test report, the Chinese version shall prevail.
- This report is based on the original report "ET-25020243C" with the adapter replaced, while the rest remains unchanged. The original report number ET-25020243C is invalid.

*** End of Report ***



Shenzhen ETR Standard Technology Co., Ltd.

No.103, No.10, Phase I, Zone 3, Xinxing Industrial Park, Xinhe, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China
Tel: +86-755-85259392 Email: etr800@etrtest.com http://www.etrlab.cn

Attestation of Compliance

No.:ET-25020243CC-1

Applicant: Shenzhen Haochuangyi Technology Co.,Ltd

Address 1101, Building 6, Changyi Industrial Plant, No.1 Lirong Road, Xinshi Community,

Dalang Street, Longhua District, Shenzhen, China

Manufacturer : Shenzhen Haochuangyi Technology Co.,Ltd

Address 1101, Building 6, Changyi Industrial Plant, No.1 Lirong Road, Xinshi Community,

Dalang Street, Longhua District, Shenzhen, China

Product: H96Max S905L3

Model(s) : H96Max S905L3

Trade Mark : H96 Max

Test Standards:

IEC 62321-1:2013, IEC 62321-2:2021, IEC 62321-3-1:2013, IEC 62321-5:2013, IEC 62321-4:2013+AMD1:2017 CSV, IEC 62321-6:2015, IEC 62321-7-1:2015, IEC 62321-7-2:2017, IEC 62321-8:2017

The submitted products have been tested by us with the listed standards.

This attestation of compliance is issued according to the council directive 2011/65/EU and its amendment directives (EU) 2015/863. It confirms that the listed product complies with all essential requirements of the RoHS directive and applies only to the sample and its technical documentation submitted to Shenzhen ETR standard Technology Co., Ltd. for testing.

After preparation of the necessary technical documentation as well as the EC conformity declaration the required CE marking can be affixed on the product. Other relevant directives have to be observed. The certificate applies to the tested sample above mentioned only and shall not imply an assessment of the whole production. It is only valid in connection with the test report number: **ET-25020243C-1**.









Shenzhen CTA Testing Technology Co., Ltd.

Room 106, Building 1, Yibaolai Industrial Park, Qiaotou Community, Fuhai Street, Bao'an District, Shenzhen, China

TEST REPORT

UL 62368-1

Audio/video, information and communication technology equipment Part 1: Safety requirements

Report reference No. CTA25021501001-M1

Tested by (name + signature) Kevin Liu

Approved by (name + signature).....: Eric Wang

Testing Laboratory Name Shenzhen CTA Testing Technology Co., Ltd.

Community, Fuhai Street, Bao 'an District, Shenzhen, China

Pprove

Applicant's Name Shenzhen Haochuangyi Technology Co.,Ltd

Xinshi Community, Dalang Street, Longhua District, Shenzhen,

China

Test specification

Standard...... UL 62368-1:2019 Edition 3

Test procedure Test report

Non-standard test method N/A

Test Report Form No. IEC62368_1E

TRF originator...... UL(US)

Master TRF Dated 2022-04-14

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Test item description H96Max S905L3

Trademark H96 Max

Manufacturer...... Shenzhen Haochuangyi Technology Co.,Ltd

1101, Building 6, Changyi Industrial Plant, No.1 Lirong Road, Xinshi Community, Dalang Street, Longhua District, Shenzhen,

CTATE

China

Model and/or type reference: H96Max S905L3

Ratings...... Input: 12V===1.0A,

From AC ADAPTER 100-240V~, 50/60Hz, 0.33A

CTATE

CTATE

List of Attachments (including a total number of pages in each attachment):

Appendix 1: National differences
Appendix 2: Photo document

Summary of testing:

The product covered by this report has been tested and complies with the applicable requirements of this standard.

Summary of compliance with National Differences:

List of countries addressed: United States of America and Canada DIFFERENCES for details.

☐ The product fulfils the requirements of UL 62368-1:2019

Copy of marking plat

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

H96 Max

H96Max S905L3

Model: H96Max S905L3 Input: 12V===1.0A

Manufacturer: Shenzhen Haochuangyi Technology Co.,Ltd

CTATESTING





Made in China

CTATESTING

Remark:

CTA TESTING

CTATESTING

CTATESTING	TING
Test item particulars:	TEST
Product group	: 🖂 end product 🔲 built-in component
Classification of use by	: Ordinary person
Supply connection	
TING	not mains connected:
Summly tolorone	⊠ ES1 □ ES2 □ ES3
Supply tolerance	+10%/-10% +20%/-15%
CTA	+ %/ - %
	None
Supply connection – type	: pluggable equipment type A -
	☐ appliance coupler
	direct plug-in
	pluggable equipment type B -
CTATESTING	non-detachable supply cord appliance coupler
TATES	permanent connection
CIL	mating connector other: Not directly connected
Considered current rating of protecti	<u>mains</u> ive □ A;
device	: Location:
	⊠ N/A
Equipment mobility	: Movable hand-held transportal direct plug-in stationary for building
.6	wall/ceiling-mounted SRME/rack-mounted
TING	other:
Overvoltage category (OVC)	
TESTIN	☐ OVC IV ☐ other: Not directly connected mains
Class of equipment	: Class II
	☐ Not classified ☐
Special installation location	: N/A restricted access area
Pollution degree (PD)	_ < \\ _ \
Manufacturer's specified T _{ma}	
IP protection class	
Power systems	
i ower systems	not AC mains
Altitude during operation (m)	
Altitude of test laboratory (m)	: 🖂 2000 m or less 🗌 m
Mass of equipment (kg)	: 0.122kg
	CTA CTA

CTATESTING	
	STING
Possible test case verdicts:	: N/A : P (Pass)
- test case does not apply to the test object	: N/A
- test object does meet the requirement	: P (Pass)
- test object does not meet the requirement	: F (Fail)
Testing:	
Date of receipt of test item	: 2025-02-15
Date (s) of performance of tests	: 2025-02-15 to 2025-02-20
General remarks:	-ES\"
Throughout this report a 🗌 comma / 🗵 poin	
General product information and other remarks: Product Description –	
1.The product is H96Max S905L3 intended to be	
technology equipment, which supplied by a 12V PS2 requirements.	. Se ben geen and to 170, 71, 67, 60
technology equipment, which supplied by a 12V	use at the maximum ambient temperature (
technology equipment, which supplied by a 12V PS2 requirements. 2.The product was submitted and evaluated for the supplied by a 12V ps. 12V p	use at the maximum ambient temperature (* 40°C.
technology equipment, which supplied by a 12V PS2 requirements. 2.The product was submitted and evaluated for permitted by the manufacturer's specification of:	use at the maximum ambient temperature (* 40°C. operating altitude up to 2000m.

CTA TESTING

TATESTING

CTATESTING	CTATES!"			
	CTA TESTING		ATESTING	
OVERVIEW OF ENERGY SO	€ 20 as 0.1		~	
Clause	Possible Hazard			
5	Electrically-caused injury			
Class and Energy Source	Body Part		Safeguards	
(e.g. ES3: Primary circuit)	(e.g. Ordinary)	В	S	R
ES1: Input port	Ordinary	N/A	N/A	N/A
ES1: All internal circuits	Ordinary	N/A	N/A	N/A
6	Electrically-caused fire			
Class and Energy Source	Material part (e.g. Printed board) Safeguards B 1st S			
(e.g. PS2: 100 Watt circuit)	(e.g. Printed board)	В	1 st S	2 nd S
PS2	Enclosure	See 6.3	Metallic	N/A
PS2	PCB	See 6.3	Min. V-1	N/A
PS2	Internal / external wiring	See 6.3	See 6.5	N/A
PS2	Other combustible components / materials	See 6.3	See 6.4.5	N/A
7	Injury caused by hazardous	substances		
Class and Energy Source	Body Part		Safeguards	
(e.g. Ozone)	(e.g., Skilled)	В	S	R
N/A	N/A	N/A	N/A	N/A
8	Mechanically-caused injury			
Class and Energy Source	Body Part		Safeguards	
(e.g. MS3: Plastic fan blades)	(e.g. Ordinary)	В	S	R
MS1: the mass of equipment	Ordinary	N/A	N/A	N/A
MS1: Edges and corners	Ordinary	N/A	N/A	N/A
9	Thermal burn			
Class and Energy Source	Body Part		Safeguards	
(e.g. TS1: Keyboard caps)	(e.g., Ordinary)	В	S	R
TS1: Accessible parts	Ordinary	N/A	N/A	N/A
10	Radiation			
Class and Energy Source	Body Part		Safeguards	
(e.g. RS1: PMP sound output)		В	S	R
RS1: LED	Ordinary	N/A	N/A	N/A

CTATESTING

'B" – Basic Safeguard; "S" – Supplementary Safeguard; "R" – Reinforced Safeguard CTATES

ENERGY SOURCE DIAGRAM

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

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

> > \boxtimes ES \bowtie PS \bowtie MS \boxtimes TS \boxtimes RS

CTA TESTIN

TATESTING

		UL 62368-1		
Clau	use	Requirement + Test	Result - Remark	Verdict
4		GENERAL REQUIREMENTS		Р
4.1.	1	Acceptance of materials, components and subassemblies	ING	Р
4.1.2	2	Use of components	TESTIN	Р
4.1.3	3	Equipment design and construction	CIRCIP	Р
4.1.4	4	Specified ambient temperature for outdoor use (°C)		N/A
4.1.	5	Constructions and components not specifically covered		P
4.1.8	8	Liquids and liquid filled components (LFC)	(See G.15)	N/A
4.1.	15	Markings and instructions	(See Annex F)	Р
4.4.3	3	Safeguard robustness	5111	Р
4.4.3	3.1	General		P
4.4.3	3.2	Steady force tests	(See Clause T.3, T.4, T.5)	Р
4.4.3	3.3	Drop tests	(31)	N/A
4.4.3	3.4	Impact tests	(See Annex T.6)	Р
4.4.3	3.5	Internal accessible safeguard tests	Not applicable	N/A
4.4.3	3.6	Glass impact tests	(See Clause T.9, Annex U)	N/A
4.4.3	3.7	Glass fixation tests		N/A
3 WANT DE PROPERTY		Glass impact test (1J)	TING	N/A
		Push/pull test (10 N)	TATES	N/A
4.4.3	3.8	Thermoplastic material tests	(See Annex T.8)	Р
4.4.3	3.9	Air comprising a safeguard		N/A
4.4.3	3.10	Accessibility, glass, safeguard effectiveness		Р
4.4.4	4	Displacement of a safeguard by an insulating liquid		N/A
4.4.	5	Safety interlocks	(See Annex K)	N/A
4.5		Explosion	ING	Р
4.5.	1	General	(See Annex M for batteries)	N/A
4.5.2	2	No explosion during normal/abnormal operating condition	(See Clause B.2, B.3)	ESTIN
		No harm by explosion during single fault conditions	(See Clause B.4)	Р
4.6		Fixing of conductors	1000000	N/A
		Fix conductors not to defeat a safeguard		N/A
	. 1	Compliance is checked by test:	(See Clause T.2)	N/A
4.7	CIP,	Equipment for direct insertion into mains socket	-outlets	N/A
4.7.2	2	Mains plug part complies with relevant standard:	JAIG	N/A
4.7.3	3	Torque (Nm)	TESTING	N/A
4.7.3	3	Torque (Nm):	CTA TEST.	N/A

G		UL 62368-1			
	Clause	Requirement + Test	Result - Remark	Verdict	
	4.8	Equipment containing coin/button cell batteries	·	N/A	
	4.8.1	General		N/A	
\	4.8.2	Instructional safeguard	GTING	N/A	
	4.8.3	Battery compartment door/cover construction	CTATES	N/A	
		Open torque test	(EW)	N/A	TES
	4.8.4.2	Stress relief test	100 miles	N/A	CTA .
	4.8.4.3	Battery replacement test		N/A	
TES	4.8.4.4	Drop test		N/A	
CAL	4.8.4.5	Impact test		N/A	
	4.8.4.6	Crush test	TING	N/A	
	4.8.5	Compliance	151	N/A	Ca
		30N force test with test probe		N/A	
		20N force test with test hook	CTA	N/A	
G	4.9	Likelihood of fire or shock due to entry of cond	uctive object	N/A	
	4.10	Component requirements		N/A	(F)
	4.10.1	Disconnect Device	(See Annex L)	N/A	
	4.10.2	Switches and relays	(See Annex G)	N/A	
	EW.	TESTIN	·		
\	5	ELECTRICALLY-CAUSED INJURY		Р	

5	ELECTRICALLY-CAUSED INJURY		Р
5.2	Classification and limits of electrical energy source	imits of electrical energy sources	
5.2.2	ES1, ES2 and ES3 limits	(FIN)	Р
5.2.2.2	Steady-state voltage and current limits	(See appended table 5.2)	Р
5.2.2.3	Capacitance limits	(See appended table 5.2)	N/A
5.2.2.4	Single pulse limits	(See appended table 5.2)	N/A
5.2.2.5	Limits for repetitive pulses	(See appended table 5.2)	N/A
5.2.2.6	Ringing signals	(See Annex H)	N/A
5.2.2.7	Audio signals	(See Clause E.1)	N/A
5.3	Protection against electrical energy sources		N/A
5.3.1	General Requirements for accessible parts to ordinary, instructed and skilled persons	CTA CTA	N/A
5.3.1 a)	Accessible ES1/ES2 derived from ES2/ES3 circuits		N/A
5.3.1 b)	Skilled persons not unintentional contact ES3 bare conductors		N/A
5.3.2.1	Accessibility to electrical energy sources and safeguards		N/A
CONTENTS.	Accessibility to outdoor equipment bare parts	CTING	N/A
	Contact requirements	TES	N/A

	UL 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict	
	Test with test probe from Annex V		_	<u>.</u>]
5.3.2.2 a)	Air gap – electric strength test potential (V):	(See appended table 5.4.9)	N/A	!
5.3.2.2 b)	Air gap – distance (mm):		N/A	-
5.3.2.3	Compliance	TATESI	N/A	1
5.3.2.4	Terminals for connecting stripped wire	CON CIL	N/A	1
5.4	Insulation materials and requirements		N/A	CTA
5.4.1.2	Properties of insulating material		N/A	
5.4.1.3	Material is non-hygroscopic		N/A	
5.4.1.4	Maximum operating temperature for insulating materials	(See appended table)	N/A	
5.4.1.5	Pollution degrees:	STING	N/A	
5.4.1.5.2	Test for pollution degree 1 environment and for an insulating compound		N/A	G
5.4.1.5.3	Thermal cycling test	CTA	N/A	
5.4.1.6	Insulation in transformers with varying dimensions	C.	N/A	
5.4.1.7	Insulation in circuits generating starting pulses		N/A	
5.4.1.8	Determination of working voltage:	(See appended table 5.4.1.8)	N/A	
5.4.1.9	Insulating surfaces		N/A	
5.4.1.10	Thermoplastic parts on which conductive metallic parts are directly mounted	CTING	N/A	
5.4.1.10.2	Vicat test:	(See appended table 5.4.1.10.2)	N/A	
5.4.1.10.3	Ball pressure test:	(See appended table 5.4.1.10.3)	N/A	CTA
5.4.2	Clearances		N/A	
5.4.2.1	General requirements		N/A	
	Clearances in circuits connected to AC Mains, Alternative method	(See Annex X)	N/A	
5.4.2.2	Procedure 1 for determining clearance	5111	N/A	
	Temporary overvoltage:		_	3
5.4.2.3	Procedure 2 for determining clearance	- cTA	N/A]
5.4.2.3.2.2	a.c. mains transient voltage:	(GIA)	_	
5.4.2.3.2.3	d.c. mains transient voltage:	22-1-1	_	
5.4.2.3.2.4	External circuit transient voltage:		_	
5.4.2.3.2.5	Transient voltage determined by measurement:		_]
5.4.2.4	Determining the adequacy of a clearance using an electric strength test	(See appended table 5.4.2)	N/A	
5.4.2.5	Multiplication factors for clearances and test voltages	TATESTIN	N/A	
		CIT		<u>j</u>
			(FILE	CTA

	UL 62368-1	<u> </u>	
Clause	Requirement + Test	Result - Remark	Verdict
5.4.2.6	Clearance measurement:	(See appended table 5.4.2)	N/A
5.4.3	Creepage distances		N/A
5.4.3.1	General	ETING	N/A
5.4.3.3	Material group:	CTATES	
5.4.3.4	Creepage distances measurement:	(See appended table 5.4.3)	N/A
5.4.4	Solid insulation		N/A
5.4.4.1	General requirements		N/A
5.4.4.2	Minimum distance through insulation:	(See appended table 5.4.4.2)	N/A
5.4.4.3	Insulating compound forming solid insulation		N/A
5.4.4.4	Solid insulation in semiconductor devices	TING	N/A
5.4.4.5	Insulating compound forming cemented joints	51	N/A
5.4.4.6	Thin sheet material		N/A
5.4.4.6.1	General requirements	CIA	N/A
5.4.4.6.2	Separable thin sheet material	CAN	N/A
	Number of layers (pcs):	22.00	N/A
5.4.4.6.3	Non-separable thin sheet material		N/A
-10	Number of layers (pcs)		N/A
5.4.4.6.4	Standard test procedure for non-separable thin sheet material	(See appended table 5.4.9)	N/A
5.4.4.6.5	Mandrel test	TESTIN	N/A
5.4.4.7	Solid insulation in wound components	CTA	N/A
5.4.4.9	Solid insulation at frequencies >30 kHz, E_P , K_R , d , V_{PW} (V)	(See appended Table 5.4.4.9)	N/A
LING	Alternative by electric strength test, tested voltage (V), K _R	(See appended Tables 5.4.4.9 and 5.4.9)	N/A
5.4.5	Antenna terminal insulation		N/A
5.4.5.1	General	ING	N/A
5.4.5.2	Voltage surge test	5111	N/A
5.4.5.3	Insulation resistance (MΩ):		N/A
	Electric strength test:	(See appended table 5.4.9)	N/A
5.4.6	Insulation of internal wire as part of supplementary safeguard	(ZII)	N/A
5.4.7	Tests for semiconductor components and for cemented joints		N/A
5.4.8	Humidity conditioning		N/A
	Relative humidity (%), temperature (°C), duration (h)	TING	_
5.4.9	Electric strength test	TATES	N/A
		CIP C.	(M)

	UL 62368-1	1	l
Clause	Requirement + Test	Result - Remark	Verdict
5.4.9.1	Test procedure for type test of solid insulation:	(See appended table 5.4.9)	N/A
5.4.9.2	Test procedure for routine test	_	N/A
5.4.10	Safeguards against transient voltages from external circuits	TESTING	N/A
5.4.10.1	Parts and circuits separated from external circuits	CIL	N/A
5.4.10.2	Test methods		N/A
5.4.10.2.1	General		N/A
5.4.10.2.2	Impulse test	(See appended table 5.4.9)	N/A
5.4.10.2.3	Steady-state test	(See appended table 5.4.9)	N/A
5.4.10.3	Verification for insulation breakdown for impulse test:	ETING	N/A
5.4.11	Separation between external circuits and earth		N/A
5.4.11.1	Exceptions to separation between external circuits and earth	= CTA	N/A
5.4.11.2	Requirements	CVA	N/A
	SPDs bridge separation between external circuit and earth		N/A
	Rated operating voltage U _{op} (V)		_
CTA	Nominal voltage U _{peak} (V)		_
DOTE THE REAL PROPERTY.	Max increase due to variation ΔU _{sp} :	JNG	_
	Max increase due to ageing ΔUsa:	TESTIN	_
5.4.11.3	Test method and compliance:	(See appended table 5.4.9)	N/A
5.4.12	Insulating liquid		N/A
5.4.12.1	General requirements		N/A
5.4.12.2	Electric strength of an insulating liquid	(See appended table 5.4.9)	N/A
5.4.12.3	Compatibility of an insulating liquid	(See appended table 5.4.9)	N/A
5.4.12.4	Container for insulating liquid	1G	N/A
5.5	Components as safeguards	STING	N/A
5.5.1	General		N/A
5.5.2	Capacitors and RC units	- 14	N/A
5.5.2.1	General requirement	CAN CITY	N/A
5.5.2.2	Safeguards against capacitor discharge after disconnection of a connector	(See appended table 5.5.2.2)	N/A
5.5.3	Transformers		N/A
5.5.4	Optocouplers	(See sub-clause 5.4 or Clause G.12)	N/A
5.5.5	Relays	(See sub-clause 5.4)	N/A
5.5.6	Resistors	(See Clause G.10)	N/A
		CO C.	(em)

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Clause	Requirement + Test	Result - Remark	Verdict
	55(1)		
5.5.7	SPDs	(See Clause G.8)	N/A
5.5.8	Insulation between the mains and an external circuit consisting of a coaxial cable	-ING	N/A
5.5.9	Safeguards for socket-outlets in outdoor equipment	TESI	N/A
	RCD rated residual operating current (mA):	CIL	
5.6	Protective conductor		N/A
5.6.2	Requirement for protective conductors		N/A
5.6	Protective conductor		N/A
5.6.2	Requirement for protective conductors		N/A
5.6.2.1	General requirements	.1G	N/A
5.6.2.2	Colour of insulation	STIN	N/A
5.6.3	Requirement for protective earthing conductors		N/A
	Protective earthing conductor size (mm²)	-< 0	_
	Protective earthing conductor serving as a reinforced safeguard	CW CI	N/A
	Protective earthing conductor serving as a double safeguard		N/A
5.6.4	Requirements for protective bonding conductors		N/A
5.6.4.1	Protective bonding conductors		N/A
2 months	Protective bonding conductor size (mm²):	CTING	_
5.6.4.2	Protective current rating (A):	CIATES	N/A
5.6.5	Terminals for protective conductors	CAN.	N/A
5.6.5.1	Terminal size for connecting protective earthing conductors (mm):		N/A
LIMO	Terminal size for connecting protective bonding conductors (mm):		N/A
5.6.5.2	Corrosion		N/A
5.6.6	Resistance of the protective bonding system	GTING	N/A
5.6.6.1	Requirements		N/A
5.6.6.2	Test Method:	(See appended table 5.6.6)	N/A
5.6.6.3	Resistance (Ω) or voltage drop:	(See appended table 5.6.6)	N/A
5.6.7	Reliable connection of a protective earthing conductor		N/A
5.6.8	Functional earthing		N/A
- « D	Conductor size (mm²):		N/A
CAN CAN	Class II with functional earthing marking:		N/A
	Appliance inlet cl & cr (mm)	TING	N/A
5.7	Prospective touch voltage, touch current and pro	otective conductor current	N/A

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	Clause	Requirement + Test	Result - Remark	Verdict	S. C.
	5.7.2	Measuring devices and networks		N/A	
	5.7.2.1	Measurement of touch current		N/A	
	5.7.2.2	Measurement of voltage	CTING	N/A	
	5.7.3	Equipment set-up, supply connections and earth connections	CTATES	N/A	
	5.7.4	Unearthed accessible parts	(See appended table 5.7.4)	N/A	CTATE
	5.7.5	Earthed accessible conductive parts:	(See appended table 5.7.5)	N/A	
ATES	5.7.6	Requirements when touch current exceeds ES2 limits	_	N/A	
		Protective conductor current (mA)		N/A	
		Instructional Safeguard:	CTING	N/A	
	5.7.7	Prospective touch voltage and touch current associated with external circuits		N/A	G
	5.7.7.1	Touch current from coaxial cables	CIA	N/A	
	5.7.7.2	Prospective touch voltage and touch current associated with paired conductor cables	(CIP)	N/A	
	5.7.8	Summation of touch currents from external circuits		N/A	
	CIAT	a) Equipment connected to earthed external circuits, current (mA):		N/A	
	N/A	b) Equipment connected to unearthed external circuits, current (mA):	TING	N/A	
	5.8	Backfeed safeguard in battery backed up supplie	es	N/A	
		Mains terminal ES	(See appended table 5.8)	N/A	75.
		Air gap (mm):	Town The Control of t	N/A	CTA
				CV	
	6	ELECTRICALLY- CAUSED FIRE		P	

		Air gap (mm):		N/A	CIL
				CAL	
	6	ELECTRICALLY- CAUSED FIRE		Р	
111	6.2	Classification of PS and PIS		Р	
	6.2.2	Power source circuit classifications:	(See appended table 6.2.2)	Р	
	6.2.3	Classification of potential ignition sources	STING	N/A	
	6.2.3.1	Arcing PIS	(See appended table 6.2.3.1)	N/A	
	6.2.3.2	Resistive PIS	(See appended table 6.2.3.2)	N/A	
	6.3	Safeguards against fire under normal operating an conditions	d abnormal operating	N/A	
	6.3.1	No ignition and attainable temperature value less than 90 % defined by ISO 871 or less than 300 °C for unknown materials	(See appended table B.1.5 and B.3)	N/A	
	CTA	Combustible materials outside fire enclosure:		N/A	
	6.4	Safeguards against fire under single fault condition	ns and G	Р	
	6.4.1	Safeguard method	Method of "control of fire spread" is used.	Р	
		•	Car	EM	TAT
					CAL

	UL 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
6.4.2	Reduction of the likelihood of ignition under single fault conditions in PS1 circuits		N/A
6.4.3	Reduction of the likelihood of ignition under single fault conditions in PS2 and PS3 circuits	ESTING	N/A
6.4.3.1	Supplementary safeguards	CTA	N/A
6.4.3.2	Single Fault Conditions:	(See appended table B.4)	N/A
	Special conditions for temperature limited by fuse		N/A
6.4.4	Control of fire spread in PS1 circuits		N/A
6.4.5	Control of fire spread in PS2 circuits		Р
6.4.5.2	Supplementary safeguards		N/A
6.4.6	Control of fire spread in PS3 circuits	CTING	N/A
6.4.7	Separation of combustible materials from a PIS		N/A
6.4.7.2	Separation by distance	. •	N/A
6.4.7.3	Separation by a fire barrier	CTA	N/A
6.4.8	Fire enclosures and fire barriers		N/A
6.4.8.2	Fire enclosure and fire barrier material properties		N/A
6.4.8.2.1	Requirements for a fire barrier		N/A
6.4.8.2.2	Requirements for a fire enclosure		N/A
6.4.8.3	Constructional requirements for a fire enclosure and a fire barrier	TING	N/A
6.4.8.3.1	Fire enclosure and fire barrier openings	TATES	N/A
6.4.8.3.2	Fire barrier dimensions	CAN CHARLES	N/A
6.4.8.3.3	Top openings and properties		N/A
ING	Openings dimensions (mm):		N/A
6.4.8.3.4	Bottom openings and properties		N/A
	Openings dimensions (mm)		N/A
	Flammability tests for the bottom of a fire enclosure	(See Clause S.3)	N/A
	Instructional Safeguard:	51	N/A
6.4.8.3.5	Side openings and properties		N/A
	Openings dimensions (mm)	- CTA	N/A
6.4.8.3.6	Integrity of a fire enclosure, condition met: a), b) or c)	(GIA)	N/A
6.4.8.4	Separation of a PIS from a fire enclosure and a fire barrier distance (mm) or flammability rating:		N/A
6.4.9	Flammability of insulating liquid:		N/A
6.5	Internal and external wiring		Р
6.5.1	General requirements	Internal wiring rated VW-1	Р
		CTA TA	EW.





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Clause	Requirement + Test	Result - Remark	Verdict
6.5.2	Requirements for interconnection to building wiring		N/A
6.5.3	Internal wiring size (mm²) for socket-outlets:	ING	N/A
6.6	Safeguards against fire due to the connection to	additional equipment	N/A
		CIL CIL	<u> </u>
7	IN HIDV CALICED BY HAZADDONE CUDETANCE	<u> </u>	NI/A

	7	INJURY CAUSED BY HAZARDOUS SUBSTANCES	N/A
	7.2	Reduction of exposure to hazardous substances	N/A
	7.3	Ozone exposure	N/A
CTA	7.4	Use of personal safeguards or personal protective equipment (PPE)	N/A
		Personal safeguards and instructions:	_
	7.5	Use of instructional safeguards and instructions	N/A
		Instructional safeguard (ISO 7010)	_
	7.6	Batteries and their protection circuits	N/A
			-1
		W - 1 //	T

8	MECHANICALLY-CAUSED INJURY		Р
8.2	Mechanical energy source classifications		Р
8.3	Safeguards against mechanical energy sources		Р
8.4	Safeguards against parts with sharp edges and co	orners	Р
8.4.1	Safeguards	CTING	Р
	Instructional Safeguard:	TATES	N/A
8.4.2	Sharp edges or corners	Edges and corners of the enclosure are rounded.	P
8.5	Safeguards against moving parts		N/A
8.5.1	Fingers, jewellery, clothing, hair, etc., contact with MS2 or MS3 parts		N/A
	MS2 or MS3 part required to be accessible for the function of the equipment	TING	N/A
	Moving MS3 parts only accessible to skilled person	51	N/A
8.5.2	Instructional safeguard:		N/A
8.5.4	Special categories of equipment containing moving parts	CTA CTA	N/A
8.5.4.1	General		N/A
8.5.4.2	Equipment containing work cells with MS3 parts		N/A
8.5.4.2.1	Protection of persons in the work cell		N/A
8.5.4.2.2	Access protection override		N/A
0.5.4.0.0.4	Override system	ING	N/A
8.5.4.2.2.1			N/A





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Clause	Requirement + Test	Result - Remark	Verdict	-
8.5.4.2.3	Emergency stop system		N/A	-]
CA CA	Maximum stopping distance from the point of activation (m)	-alG	N/A	
	Space between end point and nearest fixed mechanical part (mm)	CTATESTIN	N/A	
8.5.4.2.4	Endurance requirements	(CIP)	N/A	~ D
ING	Mechanical system subjected to 100 000 cycles of operation		N/A	CIL
ESI"	- Mechanical function check and visual inspection		N/A	
	- Cable assembly:		N/A	
8.5.4.3	Equipment having electromechanical device for destruction of media	ESTING	N/A	
8.5.4.3.1	Equipment safeguards		N/A	G
8.5.4.3.2	Instructional safeguards against moving parts:	-12	N/A	
8.5.4.3.3	Disconnection from the supply	GIA CI	N/A	
8.5.4.3.4	Cut type and test force (N):		N/A	
8.5.4.3.5	Compliance		N/A	
8.5.5	High pressure lamps		N/A	
CAL	Explosion test:		N/A	
8.5.5.3	Glass particles dimensions (mm)	TING	N/A	
8.6	Stability of equipment	TATESII	N/A	
8.6.1	General	CIL	N/A	
	Instructional safeguard:		N/A	CTA
8.6.2	Static stability		N/A	
8.6.2.2	Static stability test		N/A	
8.6.2.3	Downward force test		N/A	
8.6.3	Relocation stability	ING	N/A	
	Wheels diameter (mm):	5111	_	
	Tilt test		N/A	5
8.6.4	Glass slide test	- CTA	N/A	
8.6.5	Horizontal force test:	(31)	N/A	-
8.7	Equipment mounted to wall, ceiling or other struct	ture	N/A	
8.7.1	Mount means type:		N/A	1
8.7.2	Test methods		N/A	1
G.	Test 1, additional downwards force (N)		N/A	
	Test 2, number of attachment points and test force (N)	TESTING	N/A	
		CIP CIP	(em	CTA

		UL 62368-1		1
	Clause	Requirement + Test	Result - Remark	Verdict
	CTA	Test 3 Nominal diameter (mm) and applied torque (Nm)		N/A
	8.8	Handles strength	-ING	N/A
	8.8.1	General	TESI	N/A
	8.8.2	Handle strength test	CIA	N/A
		Number of handles		
	.NG	Force applied (N)		(31)
	8.9	Wheels or casters attachment requirements		N/A
	8.9.2	Pull test		N/A
	8.10	Carts, stands and similar carriers	ING	N/A
	8.10.1	General	£51111	N/A
	8.10.2	Marking and instructions		N/A
	8.10.3	Cart, stand or carrier loading test	- CTA	N/A
		Loading force applied (N)	CIA	N/A
	8.10.4	Cart, stand or carrier impact test	100 mm	N/A
	8.10.5	Mechanical stability		N/A
	-TAT	Force applied (N):		
	8.10.6	Thermoplastic temperature stability		N/A
	8.11	Mounting means for slide-rail mounted equipment	(SRME)	N/A
	8.11.1	General	CTATES	N/A
	8.11.2	Requirements for slide rails	CAN.	N/A
		Instructional Safeguard:		N/A
	8.11.3	Mechanical strength test		N/A
TES	8.11.3.1	Downward force test, force (N) applied:		N/A
	8.11.3.2	Lateral push force test		N/A
	8.11.3.3	Integrity of slide rail end stops	CING	N/A
	8.11.4	Compliance	53.	N/A
	8.12	Telescoping or rod antennas	4	N/A
		Button/ball diameter (mm)	CTA	

9	THERMAL BURN INJURY		Р
9.2	Thermal energy source classifications		Р
9.3	Touch temperature limits		Р
9.3.1	Touch temperatures of accessible parts:	(See appended table)	Р
9.3.2	Test method and compliance		Р
9.4	Safeguards against thermal energy sources		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
9.5	Requirements for safeguards		N/A
9.5.1	Equipment safeguard		N/A
9.5.2	Instructional safeguard		N/A
9.6	Requirements for wireless power transmitters	,	N/A
9.6.1	General		N/A
9.6.2	Specification of the foreign objects		N/A
9.6.3	Test method and compliance	(See appended table 9.6)	N/A
55.			1
10	RADIATION		Р

10	RADIATION		Р
10.2	Radiation energy source classification	CTING	Р
10.2.1	General classification	62,	Р
	Lasers		_
	Lamps and lamp systems	LED indicator RS1	_
	Image projectors:	Car	_
	X-Ray:		_
	Personal music player:		_
10.3	Safeguards against laser radiation		N/A
TAN .	The standard(s) equipment containing laser(s) comply:	CTING	N/A
10.4	Safeguards against optical radiation from lamps LED types)	and lamp systems (including	Р
10.4.1	General requirements	LED indicator RS1	P
ING	Instructional safeguard provided for accessible radiation level needs to exceed		N/A
III.	Risk group marking and location:		N/A
	Information for safe operation and installation		N/A
10.4.2	Requirements for enclosures	CTING	N/A
	UV radiation exposure	(See Annex C)	N/A
10.4.3	Instructional safeguard		N/A
10.5	Safeguards against X-radiation	CTA	N/A
10.5.1	Requirements	G	N/A
	Instructional safeguard for skilled persons:		_
10.5.3	Maximum radiation (pA/kg)	(See appended tables B.3 & B.4)	_
10.6	Safeguards against acoustic energy sources		N/A
10.6.1	General	CTING	N/A
10.6.2	Classification	TES	N/A



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Clause	Requirement + Test	Result - Remark	Verdict
ATA	Acoustic output L _{Aeq,T} , dB(A):		N/A
TANK O	Unweighted RMS output voltage (mV)		N/A
23 004 11/11/19	Digital output signal (dBFS)	CTING	N/A
10.6.3	Requirements for dose-based systems	CTATES	N/A
10.6.3.1	General requirements	(EII)	N/A
10.6.3.2	Dose-based warning and automatic decrease		N/A
10.6.3.3	Exposure-based warning and requirements		N/A
	30 s integrated exposure level (MEL30)		N/A
	Warning for MEL ≥ 100 dB(A)		N/A
10.6.4	Measurement methods	TING	N/A
10.6.5	Protection of persons	551.	N/A
	Instructional safeguards		N/A
10.6.6	Requirements for listening devices (headphones, earphones, etc.)	CTA CTA	N/A
10.6.6.1	Corded listening devices with analogue input		N/A
	Listening device input voltage (mV)		N/A
10.6.6.2	Corded listening devices with digital input		N/A
CIR	Max. acoustic output L _{Aeq,T} , dB(A)		N/A
10.6.6.3	Cordless listening devices	ING	N/A
	Max. acoustic output L _{Aeq,T} , dB(A)	TEST	N/A

		CTA	
В	NORMAL OPERATING CONDITION TESTS, ABNO		P
B.1	General		Р
B.1.5	Temperature measurement conditions	(See appended table B.1.5)	Р
B.2	Normal operating conditions		Р
B.2.1	General requirements	(See Test Item Particulars and appended test tables)	Р
	Audio Amplifiers and equipment with audio amplifiers:	(See Annex E)	N/A
B.2.3	Supply voltage and tolerances	CAN CIV	Р
B.2.5	Input test:	(See appended table B.2.5)	Р
B.3	Simulated abnormal operating conditions		Р
B.3.1	General		Р
B.3.2	Covering of ventilation openings		Р
Description of the second	Instructional safeguard:	ING	N/A
B.3.3	DC mains polarity test	TESI	N/A
		CIN CIN	(en

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	Clause	Requirement + Test	Result - Remark	Verdict
	B.3.4	Setting of voltage selector		N/A
	B.3.5	Maximum load at output terminals		P
	B.3.6	Reverse battery polarity	TING	N/A
	B.3.7	Audio amplifier abnormal operating conditions	TATESI	N/A
	B.3.8	Safeguards functional during and after abnormal operating conditions	(See appended table B.3)	P
	B.4	Simulated single fault conditions	,	Р
	B.4.1	General		Р
CTA '	B.4.2	Temperature controlling device		N/A
	B.4.3	Blocked motor test	NG	N/A
	B.4.4	Functional insulation	EST!	Р
	B.4.4.1	Short circuit of clearances for functional insulation		PIN
	B.4.4.2	Short circuit of creepage distances for functional insulation	CTA CTA	Р
	B.4.4.3	Short circuit of functional insulation on coated printed boards		N/A
	B.4.5	Short-circuit and interruption of electrodes in tubes and semiconductors		Р
	B.4.6	Short circuit or disconnection of passive components	.0	Р
	B.4.7	Continuous operation of components	ESTING	N/A
	B.4.8	Compliance during and after single fault conditions	(See appended table B.4)	Р
	B.4.9	Battery charging and discharging under single fault conditions	(See Annex M)	N/A
	С	UV RADIATION	•	N/A
CTAIL	C.1	Protection of materials in equipment from UV rac	diation	N/A
	C.1.2	Requirements	NG.	N/A
	C.1.3	Test method	STING	N/A
	C.2	UV light conditioning test		N/A
	C.2.1	Test apparatus:	_< \(\)	N/A
	C.2.2	Mounting of test samples	CAN CITY	N/A
	C.2.3	Carbon-arc light-exposure test		N/A
	C.2.4	Xenon-arc light-exposure test		N/A
	D	TEST GENERATORS		N/A
	D.1	Impulse test generators		N/A
	D.2	Antenna interface test generator	TING	N/A
	D.3	Electronic pulse generator	TESI	N/A

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Clause	Requirement + Test	Result - Remark	Verdict

E	TEST CONDITIONS FOR EQUIPMENT CONTAINI	NG AUDIO AMPLIFIERS	N/A
E.1	Electrical energy source classification for audio	signals	N/A
23112	Maximum non-clipped output power (W)	CTING	
	Rated load impedance (Ω)	TATES	
	Open-circuit output voltage (V)	CANCILL	_
		See Clause F.5	_
E.2 G	Audio amplifier normal operating conditions		N/A
3	Audio signal source type		_
	Audio output power (W)		_
	Audio output voltage (V)	TING	
	Rated load impedance (Ω)	E2 /	
	Requirements for temperature measurement	(See Table B.1.5)	N/A
E.3	Audio amplifier abnormal operating conditions	(See Table B.3, B.4)	N/A
F	EQUIPMENT MARKINGS, INSTRUCTIONS, AND I		Р
F.1	General		Р
	Language	Instructions in English are	_
- ~ TP	, TESS SIG	reviewed.	
F.2	Letter symbols and graphical symbols		Р
F.2.1	Letter symbols according to IEC60027-1	Letter symbols for quantities and units are complied with IEC 60027-1.	Р
F.2.2	Graphic symbols according to IEC, ISO or manufacturer specific	Graphical symbols are complied with IEC 60417, ISO 3864-2, ISO 7000 or ISO 7010.	P
F.3	Equipment markings	1	Р
F.3.1	Equipment marking locations	The required marking is located on the enclosure of the equipment and is easily visible	Р
F.3.2	Equipment identification markings	ESTIM	Р
F.3.2.1	Manufacturer identification	See copy of marking plate	Р
F.3.2.2	Model identification	See copy of marking plate	Р
F.3.3	Equipment rating markings	(CVA)	Р
F.3.3.1	Equipment with direct connection to mains	200	N/A
F.3.3.2	Equipment without direct connection to mains		Р
F.3.3.3	Nature of the supply voltage	Not directly connected to mains	N/A
F.3.3.4	Rated voltage	See the marking	Р
F.3.3.5	Rated frequency	TING	N/A
F.3.3.6	Rated current or rated power:	See the marking	Р

Clause			
	Requirement + Test	Result - Remark	Verdict
F.3.3.7	Equipment with multiple supply connections		N/A
F.3.4	Voltage setting device		N/A
F.3.5	Terminals and operating devices	See below.	N/A
F.3.5.1	Mains appliance outlet and socket-outlet markings	No such devices on the equipment.	N/A
F.3.5.2	Switch position identification marking:	No such switch on the equipment.	N/A
F.3.5.3	Replacement fuse identification and rating markings:	No such components	N/A
	Instructional safeguards for neutral fuse:		N/A
F.3.5.4	Replacement battery identification marking:	ING	N/A
F.3.5.5	Neutral conductor terminal	ESIN	N/A
F.3.5.6	Terminal marking location		N/A
F.3.6	Equipment markings related to equipment classification	GA CTA	N/A
F.3.6.1	Class I equipment	Class III equipment	N/A
F.3.6.1.1	Protective earthing conductor terminal:		N/A
F.3.6.1.2	Protective bonding conductor terminals:		N/A
F.3.6.2	Equipment class marking:		N/A
F.3.6.3	Functional earthing terminal marking:	.NG	N/A
F.3.7	Equipment IP rating marking	TESTING	N/A
F.3.8	External power supply output marking:	CTA	N/A
F.3.9	Durability, legibility and permanence of marking	Marking is considered to be legible and easily discernible. See also the following details	P
F.3.10	Test for permanence of markings	The label was subjected to the permanence of marking test. The label was rubbed with cloth soaked with water for 15 sec. And then again for 15 sec. With the cloth soaked with petroleum spirit. After this test there was no damage to the label. The marking on the label did not fade. There was no curling and lifting of the label edge. After each test, the marking remained legible.	P
F.4	Instructions		Р
	a) Information prior to installation and initial use		N/A
2 200	b) Equipment for use in locations where children not likely to be present	TESTING	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
CTA	c) Instructions for installation and interconnection		Р
	d) Equipment intended for use only in restricted access area	ESTING	N/A
	e) Equipment intended to be fastened in place	CTATA	N/A
	f) Instructions for audio equipment terminals	(CA)	N/A
	g) Protective earthing used as a safeguard		N/A
TING	h) Protective conductor current exceeding ES2 limits		N/A
	i) Graphic symbols used on equipment		Р
	j) Permanently connected equipment not provided with all-pole mains switch	ESTING	N/A
	k) Replaceable components or modules providing safeguard function		N/A
	I) Equipment containing insulating liquid	CTA	N/A
	m) Installation instructions for outdoor equipment	College	N/A
F.5	Instructional safeguards		N/A
G	COMPONENTS		Р
G.1	Switches		N/A
G.1.1	General	·C	N/A
G.1.2	Ratings, endurance, spacing, maximum load	ESTING	N/A
G.1.3	Test method and compliance	CTATA	N/A
G.2	Relays	CIA	N/A
G.2.1	Requirements		N/A
G.2.2	Overload test		N/A
G.2.3	Relay controlling connectors supplying power to other equipment		N/A
G.2.4	Test method and compliance	TING	N/A
G.3	Protective devices	ESI"	N/A
G.3.1	Thermal cut-offs		N/A
	Thermal cut-outs separately approved according to IEC 60730 with conditions indicated in a) & b)	CTA CTA	N/A
	Thermal cut-outs tested as part of the equipment as indicated in c)		N/A
G.3.1.2	Test method and compliance		N/A
G.3.2	Thermal links		N/A
G.3.2.1	a) Thermal links tested separately according to IEC 60691 with specifics	CTING	N/A
	b) Thermal links tested as part of the equipment	TATES	N/A

Claves	UL 62368-1	Dogult Domonic	\/a==!==1
Clause	Requirement + Test	Result - Remark	Verdict
G.3.2.2	Test method and compliance		N/A
G.3.3	PTC thermistors		N/A
G.3.4	Overcurrent protection devices	ETING	N/A
G.3.5	Safeguards components not mentioned in G.3.1 to G.3.4	CTATES	N/A
G.3.5.1	Non-resettable devices suitably rated and marking provided		N/A
G.3.5.2	Single faults conditions	(See appended table B.4)	N/A
G.4	Connectors		N/A
G.4.1	Spacings		N/A
G.4.2	Mains connector configuration:	STING	N/A
G.4.3	Plug is shaped that insertion into mains socket- outlets or appliance coupler is unlikely		N/A
G.5	Wound components	CIA	N/A
G.5.1	Wire insulation in wound components	CAL	N/A
G.5.1.2	Protection against mechanical stress		N/A
G.5.2	Endurance test		N/A
G.5.2.1	General test requirements		N/A
G.5.2.2	Heat run test		N/A
73 W 10 W 1	Test time (days per cycle):	CTING	_
	Test temperature (°C)	CTATES	
G.5.2.3	Wound components supplied from the mains	(CM)	N/A
G.5.2.4	No insulation breakdown		N/A
G.5.3	Transformers		N/A
G.5.3.1	Compliance method		N/A
	Position:		N/A
	Method of protection	TING	N/A
G.5.3.2	Insulation	551.	N/A
	Protection from displacement of windings:		
G.5.3.3	Transformer overload tests	CTA CTA	N/A
G.5.3.3.1	Test conditions	CIN	N/A
G.5.3.3.2	Winding temperatures		N/A
G.5.3.3.3	Winding temperatures - alternative test method		N/A
G.5.3.4	Transformers using FIW		N/A
G.5.3.4.1	General		N/A
Dear The	FIW wire nominal diameter	ETING	_
G.5.3.4.2	Transformers with basic insulation only	CTATES	N/A
		CM.	CIN CONTRACTOR

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Clause	Requirement + Test	Result - Remark	Verdict
G.5.3.4.3	Transformers with double insulation or reinforced insulation		N/A
G.5.3.4.4	Transformers with FIW wound on metal or ferrite core	ESTING	N/A
G.5.3.4.5	Thermal cycling test and compliance	CTATA	N/A
G.5.3.4.6	Partial discharge test	CO	N/A
G.5.3.4.7	Routine test		N/A
G.5.4	Motors		N/A
G.5.4.1	General requirements		N/A
G.5.4.2	Motor overload test conditions		N/A
G.5.4.3	Running overload test	GTING	N/A
G.5.4.4.2	Locked-rotor overload test		N/A
	Test duration (days):		
G.5.4.5	Running overload test for DC motors	CTA	N/A
G.5.4.5.2	Tested in the unit	C.	N/A
G.5.4.5.3	Alternative method		N/A
G.5.4.6	Locked-rotor overload test for DC motors		N/A
G.5.4.6.2	Tested in the unit		N/A
310	Maximum Temperature:	, C.	N/A
G.5.4.6.3	Alternative method	ESTING	N/A
G.5.4.7	Motors with capacitors	CTATE	N/A
G.5.4.8	Three-phase motors	(37)	N/A
G.5.4.9	Series motors		N/A
TING	Operating voltage:		_
G.6	Wire Insulation	1	N/A
G.6.1	General		N/A
G.6.2	Enamelled winding wire insulation	STING	N/A
G.7	Mains supply cords	Es	N/A
G.7.1	General requirements		N/A
	Type:	CTA	
G.7.2	Cross sectional area (mm² or AWG):		N/A
G.7.3	Cord anchorages and strain relief for non- detachable power supply cords		N/A
G.7.3.2	Cord strain relief		N/A
G.7.3.2.1	Requirements	_	N/A
JE-#	Strain relief test force (N):	CTING	N/A
23 mary train			

Clause	UL 62368-1 Requirement + Test	Result - Remark	Verdict
	STIM	TOOUT TOTAL	
G.7.3.2.3	Cord sheath or jacket position, distance (mm):		N/A
G.7.3.2.4	Strain relief and cord anchorage material	. 164	N/A
G.7.4	Cord Entry	ZESTING	N/A
G.7.5	Non-detachable cord bend protection	CTATE	N/A
G.7.5.1	Requirements	(CIA)	N/A
G.7.5.2	Test method and compliance		N/A
TING	Overall diameter or minor overall dimension, <i>D</i> (mm)		_
	Radius of curvature after test (mm):		_
G.7.6	Supply wiring space	G	N/A
G.7.6.1	General requirements	ESTIN	N/A
G.7.6.2	Stranded wire		N/A
G.7.6.2.1	Requirements	70	N/A
G.7.6.2.2	Test with 8 mm strand	CIA CI	N/A
G.8	Varistors		N/A
G.8.1	General requirements		N/A
G.8.2	Safeguards against fire		N/A
G.8.2.1	General		N/A
G.8.2.2	Varistor overload test	-ING	N/A
G.8.2.3	Temporary overvoltage test	TESTIN	N/A
G.9	Integrated circuit (IC) current limiters	CTA	N/A
G.9.1	Requirements		N/A
ING	IC limiter output current (max. 5A)		
UMB	Manufacturers' defined drift		
G.9.2	Test Program		N/A
G.9.3	Compliance	.Ca	N/A
G.10	Resistors	ESTING	N/A
G.10.1	General		N/A
G.10.2	Conditioning	×0.	N/A
G.10.3	Resistor test	CAN CIT	N/A
G.10.4	Voltage surge test		N/A
G.10.5	Impulse test		N/A
G.10.6	Overload test		N/A
G.11	Capacitors and RC units		N/A
G.11.1	General requirements	G	N/A
G.11.2	Conditioning of capacitors and RC units	TESTING	N/A
J. 11.2	Conditioning of capacitors and NO units	CTA	
			EM.

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Clause	Requirement + Test	Result - Remark	Verdict
G.11.3	Rules for selecting capacitors		N/A
G.12	Optocouplers		N/A
7.3 03-11-11	Optocouplers comply with IEC 60747-5-5 with specifics	TESTING	N/A
	Type test voltage V _{ini,a} :	CAN CIL	
	Routine test voltage, V _{ini, b} :		
G.13	Printed boards		P
G.13.1	General requirements	Approved Printed board used	Р
G.13.2	Uncoated printed boards		Р
G.13.3	Coated printed boards	.s.G	N/A
G.13.4	Insulation between conductors on the same inner surface	ESTIT	N/A
G.13.5	Insulation between conductors on different surfaces	C.TA	N/A
	Distance through insulation:	(CV)	N/A
	Number of insulation layers (pcs):		
G.13.6	Tests on coated printed boards		N/A
G.13.6.1	Sample preparation and preliminary inspection		N/A
G.13.6.2	Test method and compliance		N/A
G.14	Coating on components terminals	STING	N/A
G.14.1	Requirements:	(See Clause G.13)	N/A
G.15	Pressurized liquid filled components	(EM)	N/A
G.15.1	Requirements		N/A
G.15.2	Test methods and compliance		N/A
G.15.2.1	Hydrostatic pressure test		N/A
G.15.2.2	Creep resistance test		N/A
G.15.2.3	Tubing and fittings compatibility test	TING	N/A
G.15.2.4	Vibration test	29.	N/A
G.15.2.5	Thermal cycling test		N/A
G.15.2.6	Force test	CTA	N/A
G.15.3	Compliance	CAN	N/A
G.16	IC including capacitor discharge function (ICX)		N/A
G.16.1	Condition for fault tested is not required		N/A
TAT	ICX with associated circuitry tested in equipment		N/A
7 7	ICX tested separately		N/A





Clause	Requirement + Test	Result - Remark	Verdict
Ciause	25111	Result - Nemark	veiulul
CTA	Smallest capacitance and smallest resistance specified by ICX manufacturer for impulse test:		_
	Mains voltage that impulses to be superimposed on	ESTING	
	Largest capacitance and smallest resistance for ICX tested by itself for 10000 cycles test	GM CTATE	_
G.16.3	Capacitor discharge test:		N/A
Н	CRITERIA FOR TELEPHONE RINGING SIGNALS		N/A
H.1	General		N/A
H.2	Method A		N/A
H.3	Method B	TING	N/A
H.3.1	Ringing signal	E511	N/A
H.3.1.1	Frequency (Hz)		
H.3.1.2	Voltage (V)	CTA	
H.3.1.3	Cadence; time (s) and voltage (V)		_
H.3.1.4	Single fault current (mA):		
H.3.2	Tripping device and monitoring voltage		N/A
H.3.2.1	Conditions for use of a tripping device or a monitoring voltage		N/A
H.3.2.2	Tripping device	TING	N/A
H.3.2.3	Monitoring voltage (V)	TEST	N/A
J	INSULATED WINDING WIRES FOR USE WITHOUT	T INTERLEAVED INSULATION	N/A
J.1	General		N/A
ING	Winding wire insulation:		_
Libra	Solid round winding wire, diameter (mm):		N/A
	Solid square and rectangular (flatwise bending) winding wire, cross-sectional area (mm²)	.0	N/A
J.2/J.3	Tests and Manufacturing	(See separate test report)	_
K	SAFETY INTERLOCKS		N/A
K.1	General requirements		N/A
	Instructional safeguard:		N/A
K.2	Components of safety interlock safeguard mecha	anism	N/A
K.3	Inadvertent change of operating mode		N/A
K.4	Interlock safeguard override		N/A
K.5	Fail-safe		N/A
K.5.1	Under single fault condition	ING	N/A
K.6	Mechanically operated safety interlocks	TEST	N/A
		C.W.	(en

		UL 62368-1		
	Clause	Requirement + Test	Result - Remark	Verdict
	K.6.1	Endurance requirement		N/A
	K.6.2	Test method and compliance:		N/A
	K.7	Interlock circuit isolation	STING	N/A
	K.7.1	Separation distance for contact gaps & interlock circuit elements		N/A
		In circuit connected to mains, separation distance for contact gaps (mm):		N/A
CTATE	C	In circuit isolated from mains, separation distance for contact gaps (mm):		N/A
CIR		Electric strength test before and after the test of K.7.2:	(See appended table 5.4.9)	N/A
	K.7.2	Overload test, Current (A)		N/A
	K.7.3	Endurance test		N/A
	K.7.4	Electric strength test		N/A
	L	DISCONNECT DEVICES		N/A
	L.1	General requirements		N/A
	L.2	Permanently connected equipment		N/A
	L.3	Parts that remain energized		N/A
	L.4	Single-phase equipment		N/A
	L.5	Three-phase equipment		N/A
	L.6	Switches as disconnect devices		N/A
	L.7	Plugs as disconnect devices		N/A
	L.8	Multiple power sources		N/A
		Instructional safeguard:		N/A
	М	EQUIPMENT CONTAINING BATTERIES AND THEIR PROTECTION CIRCUITS		N/A
	M.1	General requirements		N/A
	M.2	Safety of batteries and their cells	JNG	N/A
	M.2.1	Batteries and their cells comply with relevant IEC standards:		N/A
	M.3	Protection circuits for batteries provided within the equipment	CCTA	N/A
	M.3.1	Requirements		N/A
	M.3.2	Test method		N/A
		Overcharging of a rechargeable battery		N/A
		Excessive discharging		N/A
		Unintentional charging of a non-rechargeable battery		N/A
		Reverse charging of a rechargeable battery		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
M.3.3	Compliance	(See appended table M.3)	N/A
M.4	Additional safeguards for equipment containing a portable secondary lithium battery		
M.4.1	General		N/A
M.4.2	Charging safeguards	CACIL	N/A
M.4.2.1	Requirements		N/A
M.4.2.2	Compliance	(See appended table M.4.2)	N/A
M.4.3	Fire enclosure		N/A
M.4.4	Drop test of equipment containing a secondary lithium battery		N/A
M.4.4.2	Preparation and procedure for the drop test		N/A
M.4.4.3	Drop, Voltage on reference and dropped batteries (V); voltage difference during 24 h period (%)::		N/A
M.4.4.4	Check of the charge/discharge function		N/A
M.4.4.5	Charge / discharge cycle test		N/A
M.4.4.6	Compliance		N/A
M.5	Risk of burn due to short-circuit during carrying		N/A
M.5.1	Requirement		N/A
M.5.2	Test method and compliance		N/A
M.6	Safeguards against short-circuits		N/A
M.6.1	External and internal faults		N/A
M.6.2	Compliance		N/A
M.7	Risk of explosion from lead acid and NiCd batte	ries	N/A
M.7.1	Ventilation preventing explosive gas concentration		N/A
	Calculated hydrogen generation rate:		N/A
M.7.2	Test method and compliance		N/A
	Minimum air flow rate, Q (m³/h)	TING	N/A
M.7.3	Ventilation tests	55.	N/A
M.7.3.1	General		N/A
M.7.3.2	Ventilation test – alternative 1		N/A
	Hydrogen gas concentration (%)		N/A
M.7.3.3	Ventilation test – alternative 2		N/A
	Obtained hydrogen generation rate:		N/A
M.7.3.4	Ventilation test – alternative 3		N/A
	Hydrogen gas concentration (%)		N/A
M.7.4	Marking:		N/A
		CTATE CTATE	EW.





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	Clause	Requirement + Test	Result - Remark	Verdict
	M.8	Protection against internal ignition from external spark sources of batteries with aqueous electrolyte		N/A
	M.8.1	General		N/A
	M.8.2	Test method	TESIN	N/A
	M.8.2.1	General		N/A
	M.8.2.2	Estimation of hypothetical volume V _Z (m ³ /s):		_
	M.8.2.3	Correction factors:		
	M.8.2.4	Calculation of distance d (mm)		_
TA	M.9	Preventing electrolyte spillage		N/A
	M.9.1	Protection from electrolyte spillage		N/A
	M.9.2	Tray for preventing electrolyte spillage		N/A
	M.10	Instructions to prevent reasonably foreseeable misuse		N/A
		Instructional safeguard		N/A
	N	ELECTROCHEMICAL POTENTIALS		N/A
		Material(s) used		_
	0	MEASUREMENT OF CREEPAGE DISTANCES AN	D CLEARANCES	N/A
		Value of X (mm)		_
	Р	SAFEGUARDS AGAINST CONDUCTIVE OBJECTS	S	Р
	P.1	General		Р
	P.2	Safeguards against entry or consequences of en	try of a foreign object	N/A
	P.2.1	General		N/A
	P.2.2	Safeguards against entry of a foreign object		N/A
		Location and Dimensions (mm)		_
TAIL	P.2.3	Safeguards against the consequences of entry of a foreign object		N/A
	P.2.3.1	Safeguard requirements		N/A
		The ES3 and PS3 keep-out volume in Figure P.3 not applicable to transportable equipment		N/A
		Transportable equipment with metalized plastic parts		N/A
	P.2.3.2	Consequence of entry test		N/A
	P.3	Safeguards against spillage of internal liquids		
	P.3.1	General		N/A
	P.3.2	Determination of spillage consequences		N/A
	P.3.3	Spillage safeguards		N/A
	P.3.4	Compliance		N/A

Clause	UL 62368-1	Pocult Pomorte	\/ord:-+
Clause	Requirement + Test	Result - Remark	Verdict
P.4	Metallized coatings and adhesives securing part	s	N/A
P.4.1	General		N/A
P.4.2	Tests		N/A
	Conditioning, T _C (°C):		_
	Duration (weeks):		
Q	CIRCUITS INTENDED FOR INTERCONNECTION	WITH BUILDING WIRING	N/A
Q.1	Limited power sources		N/A
Q.1.1	Requirements		N/A
	a) Inherently limited output		N/A
	b) Impedance limited output		N/A
	c) Regulating network limited output		N/A
	d) Overcurrent protective device limited output		N/A
	e) IC current limiter complying with G.9		N/A
Q.1.2	Test method and compliance:	(See appended table Q.1)	N/A
	Current rating of overcurrent protective device (A)		N/A
Q.2	Test for external circuits – paired conductor cable		N/A
	Maximum output current (A)		N/A
	Current limiting method:		
R	LIMITED SHORT CIRCUIT TEST		N/A
R.1	General		N/A
R.2	Test setup		N/A
	Overcurrent protective device for test:		
R.3	Test method		N/A
	Cord/cable used for test		
R.4	Compliance		N/A
S	TESTS FOR RESISTANCE TO HEAT AND FIRE		N/A
S.1	Flammability test for fire enclosures and fire bar where the steady state power does not exceed 4		N/A
	Samples, material:		
	Wall thickness (mm):		_
	Conditioning (°C):		
	Test flame according to IEC 60695-11-5 with conditions as set out		N/A
	- Material not consumed completely		N/A
	- Material extinguishes within 30s		N/A
		(CIA)	G II

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Clause	Requirement + Test	Result - Remark	Verdict	
	- No burning of layer or wrapping tissue		N/A	7
S.2	Flammability test for fire enclosure and fire barri	ier integrity	N/A	1
i .	Samples, material		_	
	Wall thickness (mm)		_	
	Conditioning (°C)		_	
S.3	Flammability test for the bottom of a fire enclosu	ure	N/A	c٦
S.3.1	Mounting of samples		N/A	
S.3.2	Test method and compliance		N/A	
	Mounting of samples		_	
	Wall thickness (mm)		_	
S.4	Flammability classification of materials		N/A	
S.5	Flammability test for fire enclosure materials of equipment with a steady state power exceeding 4 000 W		N/A	
	Samples, material		_	
	Wall thickness (mm)		_	
	Conditioning (°C)		_	
Т	MECHANICAL STRENGTH TESTS		Р	
T.1	General		Р	
T.2	Steady force test, 10 N:	(See appended table T.2)	N/A	
T.3	Steady force test, 30 N:	(See appended table T.3)	N/A	
T.4	Steady force test, 100 N:	(See appended table T.4)	N/A	7
T.5	Steady force test, 250 N:	(See appended table T.5)	Р	
T.6	Enclosure impact test	(See appended table T.6)	Р	
	Fall test		Р	
	Swing test		Р	
T.7	Drop test:	(See appended table T.7)	N/A	
T.8	Stress relief test:		Р	3
T.9	Glass Impact Test:	(See appended table T.9)	N/A	
T.10	Glass fragmentation test	•	N/A	
	Number of particles counted:		N/A	
T.11	Test for telescoping or rod antennas	•	N/A	
	Torque value (Nm):		N/A	
U	MECHANICAL STRENGTH OF CATHODE RAY TUE AGAINST THE EFFECTS OF IMPLOSION	BES (CRT) AND PROTECTION	N/A	
U.1	General		N/A	
		Carry CV.		_

		(cm)	1
	UL 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
	Instructional safeguard :		N/A
U.2	Test method and compliance for non-intrinsically p	protected CRTs	N/A
U.3	Protective screen		N/A
٧	DETERMINATION OF ACCESSIBLE PARTS		N/A
V.1	Accessible parts of equipment		N/A
V.1.1	General		N/A
V.1.2	Surfaces and openings tested with jointed test probes		N/A
V.1.3	Openings tested with straight unjointed test probes		N/A
V.1.4	Plugs, jacks, connectors tested with blunt probe		N/A
V.1.5	Slot openings tested with wedge probe		N/A
V.1.6	Terminals tested with rigid test wire		N/A
V.2	Accessible part criterion		N/A
X	ALTERNATIVE METHOD FOR DETERMINING CLEAR CIRCUITS CONNECTED TO AN AC MAINS NOT EXCRMS)		N/A
	Clearance:	(See appended table X)	N/A
Υ	CONSTRUCTION REQUIREMENTS FOR OUTDOOR	RENCLOSURES	N/A
Y.1	General		N/A
Y.2	Resistance to UV radiation		N/A
Y.3	Resistance to corrosion	TESTIN	N/A
Y.3	Resistance to corrosion		N/A
Y.3.1	Metallic parts of outdoor enclosures are resistant to effects of water-borne contaminants by:		N/A
Y.3.2	Test apparatus		N/A
Y.3.3	Water – saturated sulphur dioxide atmosphere		N/A
Y.3.4	Test procedure:		N/A
Y.3.5	Compliance		N/A
Y.4	Gaskets		N/A
Y.4.1	General		N/A
Y.4.2	Gasket tests		N/A
	Tensile strength and elongation tests		N/A
Y.4.3			
Y.4.3	Alternative test methods		N/A
Y.4.3 Y.4.4			N/A N/A
	Alternative test methods:		
Y.4.4	Alternative test methods: Compression test	(See Annex P.4)	N/A
Y.4.4 Y.4.5	Alternative test methods :: Compression test Oil resistance	,	N/A N/A

Clause	Requirement + Test	Result - Remark	Verdict	
.5.2	46.13	1	VEIGIGE	
	Protection from moisture		N/A	
	Relevant tests of IEC 60529 or Y.5.3		N/A	
.5.3	Water spray test		N/A	
.5.4	Protection from plants and vermin		N/A	
.5.5	Protection from excessive dust	CONT.	N/A	TES
.5.5.1	General		N/A	CIA
.5.5.2	IP5X equipment		N/A	
.5.5.3	IP6X equipment		N/A	
.6	Mechanical strength of enclosures		N/A	
.6.1	General		N/A	
.6.2	Impact test	(See Table T.6)	N/A	
	CIP CI	CT CT	ATESTIN	<i>3</i>
.5	5.4 5.5 5.5.1 5.5.2 5.5.3 6	Water spray test Protection from plants and vermin Protection from excessive dust General PEX equipment PEX equipment Mechanical strength of enclosures General	Water spray test Protection from plants and vermin Protection from excessive dust General JESX equipment Mechanical strength of enclosures JESX equipment JESX equipmen	Mater spray test N/A Protection from plants and vermin N/A Protection from excessive dust N/A N/A N/A N/A N/A N/A N/A N/



	JAIG	UL 62368-1		
Clause	Requirement + Test		Result - Remark	Verdict

Clause	Requirement + Test			Resu	Result - Remark		
CTA		16	TING	•			
5.2	TABLE: Classification	on of electrical en	ergy soul	ces		ING	Р
Supply	Location (e.g.	Test conditions		F	Parameters		ES Class
voltage	oltage circuit designation)		U (V)	I (mA)	Type ¹⁾	Additional Info ²⁾	Class
12Vdc	All circuits	Normal:			SS		
IING		Abnormal:			SS		ES1 (declar
ING	-50	Single fault – SC/OC)			SS		ed)

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

5.4.1.8	TABLE: Working volta	ge measuremer	nt		N/A				
Location		RMS voltage (V)	Peak voltage (V)	Frequency (Hz)	Comm	ents			
	res'"								
CIL		-55	ING						
Supplementary information:									
				TE	91				

Method: ISO 306 / B50 Object/ Part No./Material Manufacturer/trademark Thickness (mm) T softening (°	1.10.2 TABLE: Vicat soft	TABLE: Vicat softening temperature of thermoplastics					
Object/ Part No./Material Manufacturer/trademark Thickness (mm) T softening (°	od		.: ISO 306 / B50		_		
STING	ct/ Part No./Material	Manufacturer/trademark	Thickness (mm)	T softeni	T softening (°C)		
		CTING					
TATE	TATE	3	.NG				

		13 mm				CALL	
5.4.1.10.3	TABLE: Ball pre	ssure test of thermoplas	stics				N/A
Allowed impi	ression diameter ((mm)	:	≤ 2 m	m		_
Object/Part N	No./Material	Manufacturer/trademark	Thickness	(mm)	Test temperature (°C)		ession ter (mm)
CIA,		GTIN	(G				
Supplementa	ary information:						
		CIP CI		CI	CTATESTIN		





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

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

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

			L.V		2113				
5.4.4.2	TABLE: Minimun	n distance through insu	lation		N/A				
Distance through insulation (DTI) at/of		Peak voltage (V)	Insulation	Required DTI (mm)	Measured DTI (mm)				
Supplementary information:									
TAT	E		G						

5.4.4.9	TABLE: Solid in	TABLE: Solid insulation at frequencies >30 kHz						
Insulation m	naterial	E _P	Frequency (kHz)	K R	Thickness d (mm)	Insulation	V _{PW} (Vpk)	-55
					20 as II while		A Constitution of the Cons	CTATE
Supplementary information:								
1112							9.0	

5.4.9	TABLE: Electric strength tests				N/A	
Test voltage applied between:		Voltage shape (Surge, Impulse, AC, DC, etc.)	Test voltage (V)		Breakdown Yes / No	
		22 20 18 (37)		AZ		
			CAN			
Supplem	entary information:	·				

5.5.2.2	TABLE: Stored discharge on capacitors		N/A
	CIA CTA	TESTING	
		CTA	

		10:	G	UL 62368-1					
	Clause	Requirer	ment + Test		Result - Rema	ark	Verdict		
	Location Supplementary X-capacitors ins [] bleeding re [] ICX: 1) Normal operations			CTING	-		- '		
	Location		Supply voltage (V)	Operating and fault condition 1)	Switch position	Measured voltage (Vpk)	ES Class		
			1000		C/L				
	Location Supplemen X-capacitor [] bleedin [] ICX:	ntary infori	mation:						
	[] bleedi	X-capacitors installed for testing: [] bleeding resistor rating:							
CTA		[] ICX: 1) Normal operating condition (e.g., normal operation, or open fuse), SC= short circuit, OC= open circuit							
	5.6.6	TABLE:	Resistance of protect	ctive conductors and	terminations		N/A		

Location		Test current (A)	Duration (min)	Voltage drop Resistan (V) (Ω)						
				CVA	,					
Supplementary information:										
-ING										
	TESI		. Ca							
5.7.4	TABLE: Unearthed acc	essible parts			N/A					

5.7.4	TABLE	E: Unearthed acces	sible parts				N/A	
Location		Operating and	Supply	F	ES			
		fault conditions	Voltage (V)	Voltage (V _{rms} or V _{pk})	Current Freq. (Hz)		class	
								TATES
Supplement	tary infor	rmation:						C.
Abbreviatio	n: SC=	short circuit; OC= o	pen circuit				Will Down College	

5.7.5	TABLE: Earthed access	ible conductive part			N/A			
Supply vo	Itage (V):		STING					
Phase(s):		[] Single Phase; [] Three	Phase: [] Delta	[] Wye				
Power Dis	tribution System:	[] TN []TT []IT						
Location		Fault Condition No in IEC 60990 clause 6.2.2	Touch current (mA)	Commo	ent			
Suppleme	ntary Information:							
ATA	TEO	-ING						
	Em.	CTATESTING	CTATE	STING				



	JAIG	UL 62368-1		
Clause	Requirement + Test		Result - Remark	Verdict

5.8	TABLE:	Backfeed s	JAIG	N/A					
Location	_ocation		Operating and fault condition	Time (s)	Open-circuit voltage (V)	Touch current (A)	ES Class		
							TES		
Supplemen	Supplementary information:								
Abbreviation	n: SC= sh	ort circuit, O	C= open circuit				The state of the s		

	Abbreviation	n: SC= short circuit, OC=	open circuit				The second
CTATES			uG.				
C /	6.2.2	TABLE: Power source	circuit classificat	ions			Р
	Location	Operating and fault condition	Voltage (V)	Current (A)	Max. Power ¹⁾ (W)	Time (S)	PS class
	Input port	Normal operation	(67)			CT CT	PS2 (declare)
	USB output	Normal operation	4.99	2.62	13.15	3	PS1
	USB output	R1 SC	5.02	0.5	2.51	3	PS1

Abbreviation: SC= short circuit; OC= open circuit

1) Measured after 3 s for PS1 and measured after 5 s for PS2 and PS3.

	6.2.3.1 TABLE: Determin		nation of Arcing PIS	ation of Arcing PIS		N/A	.0"
	Location		Open circuit voltage after 3 s (Vpk)	Measured r.m.s current (A)	Calculated value	Arcing PIS? Yes / No	CTATES
	ING					The state of the s	
TES	Supplement	ary information:					
CAL		-5	STING				

6.2.3.2	TABLE: Determi	nation of resistive PIS	ES	N/A
Location		Operating and fault condition	Dissipate power (W)	Arcing PIS? Yes / No
			(EW)	
Suppleme	ntary information:			
Abbreviati	on: SC= short circui	t; OC= open circuit		

8.5.5	TABLE: Hig	h pressure lamp	STING			N/A
Lamp mar	nufacturer	Lamp type	Explosion method	Longest axis of	Par	ticle found
				TATES		





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	100	G		UL 6	32368-1				
Clause	Require	ment + Tes	t			Result -	Remark		Verdict
CTA					ING	1			1
							glass par (mm)		beyond 1 m Yes / No
							TATES	, -	
Supplemer	ntary inforn	nation:	3000					, <u>, , , , , , , , , , , , , , , , , , </u>	
						No wantship			att. to
NG									
9.6	TABLE	: Tempera	ture meas	urements	s for wireles	ss power t	ransmitter	s	N/A
Supply vo	Itage (V)			:					_
			tter (W)			-ING	5		_
			eiver and contact		ceiver and t contact		ver and at of 2 mm		ceiver and at
Foreign	objects	Object (°C)	Ambient (°C)	Object (°C)	Ambient (°C)	Object (°C)	Ambient (°C)	Object (°C)	Ambient (°C)
								S TOWN THE	
Suppleme	ntary inforr	mation:							
	STIN								
CTA	1		CT CT		ING				
			CT				TATES		
							TATES		

CTATESTING

CTATES



	IG	UL 62368-1		
Clause	Requirement + Test		Result - Remark	Verdict

- R				15				
CTA	-			CTING				
5.4.1.4,	TABLE: Tempe	erature me	asurem	ents				Р
9.3, B.1.5, B.2.6								
Supply volt	age (V)		:	12\	/dc	-	-	_
Ambient ter	mperature during	test T _{amb} (°	C):	See l	pelow	-	-	_
Maximum r	neasured tempera	ature <i>T</i> of p	art/at:		T (°	°C)		Allowed T _{max} (°C)
DC inlet		STING	9	32.8	47.8			Ref.
PCB near l	J1 CTA	LE-		60.5	75.5	иG		130
C241 body	CIN			42.8	57.8			105
PCB near 3	BU1			50.5	65.5		-	130
Plastic enc	losure inside nea	r main boaı	rd	40.9	55.9		-	Ref.
Ambient	Ambient				Shift to 40°C			
Touch Ten	nperatures							
Enclosure	outside near mair	board		35.6				77
Button				28.9				77
Surface of	Surface of the adapter Ambient						ING	77
Ambient						TF	511.	
Temperatu	re T of winding:	t ₁ (°C)	R ₁ (Ω) t ₂ (°C)	$R_2\left(\Omega\right)$	T (°C)	Allowed T _{max} (°C)	Insulation class
					0.00			

Note 1: Tma should be considered as directed by appliable requirement.

Note 2: Toch Temperatures, this is included in assessment of Toch Temperatures(Clause 9).

Note 3: The maximum ambient temperature specified by manufacturer is 40°C.

					TATE			Later Land		
B.2.5	Т	ABLE: Inpu	ut test		The state of the s			EPI		
U (V)	Hz	I (A)	I rated (A)	P (W)	P rated (W)	Fuse No	I fuse (A)	Condition/statu s		
12		0.752	1.0					Normal opeartion		
Supple	mentar	y informatio	n:			•				
K G	P.			-61	ING					
			GIA C	TATES		- 10	TESTIN	G		
						C				



	JAIG	UL 62368-1		
Clause	Requirement + Test		Result - Remark	Verdict

	B.3, B.4	TAE	BLE: Abnormal	operating	and fault	condition t	tests	:NG	Р
	Ambient ter	npera	ture T _{amb} (°C)			:		23.8-24.5	_
	Power sour	ce for	EUT: Manufact	urer, mode	l/type, out	putrating:	C	(P	_
	Component	No.	Condition	Supply voltage (V)	Test time	Fuse no.	Fuse current (A)	Observation	n
CTATES	Opening	æ	Block	12Vdc	1hrs12 mins	- 1	STING	Normal operation, r damage, no hazard max. Temperature: U1: 69.4°C, Enclosi outside near mian b 42.3°C, Ambient: 24	s, The PCB near ure oard:
	C25		SC	12Vdc	10mins	CIA		Unit shut down, recono damage, no haz	
	C241		SC	12Vdc	10mins			Unit shut down, reco	

- 1. SC Short Circuit; OC Open Circuit; OL- Overload;
- 2. No ignition during and after all tests;
- 3. Output voltage comply with ES1 during and after all tests.
- 4. NB no indication of dielectric breakdown; NC Cheesecloth remained intact; NT Tissue paper remained intact.
- 5. Output circuit is under ES1 limit.

	M.3	TABLE: Pr	otection circu	its for batteri	es provided v	vithin the eq	uipment	N/A	
ATES	Is it possi	ble to install the	battery in a re	verse polarity	position?:			_	
				Charging					
	Equipment Specification		Voltage (V)			Current (A)			
					STATES				
			Battery specification						
			Non-rechargeable batteries		Rechargeable batteries				
			Discharging	Unintentional	Char	ging	Discharging		
	Manut	facturer/type	current (A)	charging current (A)	Voltage (V)	Current (A)	current (A)	charging current (A)	
		TESTIN							
	Note: The	toctc of M 2 2 av	o appliachla ar	alı () ulban abayıa	opproprieto de	ata ia nat avai	اماما		

Note: The tests of M.3.2 are applicable only when above appropriate data is not available.



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	JAIG		UL 623	368-1				
Clause	Requirement + Test				Result -	Verdict		
CIA			CTI	NG				
Specified ba	attery tempera	ture (°C)	TES		:		ING	
Component No.	Fault condition	Charge/ discharge mode	Test time	Temp.	Current (A)	Voltage (V)	Observa	ation
					CIA			
Supplementa	ary information	1:		•				
1 1/1 -		circuit; OC= open c			-		spillage of li	quid;

battery			juards for equipment containing a secondary lithium				
Maximum specified chargi	ing voltag	e (V)	- AA7				
Maximum specified chargi	ing curren	t (A)		:		_	
Highest specified charging	g tempera	ture (°C)		:	CAN CIT		
Lowest specified charging	g temperat	ure (°C)		:			
Battery Operating		Measurement			Observation		
manufacturer/type and fault condition		Charging voltage (V)	Charging current (A)	Temp. (°C)			
TANK TO THE PARTY OF THE PARTY		TE	5/11				
Supplementary information	າ:		•				
Abbreviation: SC= short c maximum specified chargi specified charging temper	ing curren						

Q.1	TABLE: Circuits int	ended for inte	erconnectio	n with build	ling wiring	(LPS)	N/A
Output	Condition	11 00	Time (a)	I _{sc} (A)		S (VA)
Circuit	Condition	U _{oc} (V)	Time (s)	Meas.	Limit	Meas.	Limit
	C			STIN			
	G		CT	TE			-11/
			CAN				TES!
Suppleme	entary Information:						
						No.	

T.2, T.3, T.4, T.5	TABLE: Steady force test		Р
	CTATES!	CTATESTING	





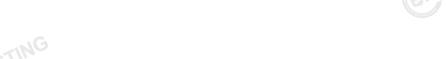
	IG	UL 62368-1		
Clause	Requirement + Test		Result - Remark	Verdict

	CTA			NG			1	1
	Location/Part	Material	Thickness (mm)	Probe	Force (N)	Test Duration (s)	Observation	
	Enclosure Top	Plastic	See 4.1.2		250	5	Enclosure remained intact, no crack/opening developed.	Ć
CTATES	Enclosure Side	Plastic	See 4.1.2		250	5	Enclosure remained intact, no crack/opening developed.	
	Enclosure Bottom	Plastic	See 4.1.2	CTATE	250	5	Enclosure remained intact, no crack/opening developed.	G
	Supplementary infor	mation:						
G						Now ext		

Location/Part	Material	Thickness (mm)	Height (mm)	Observation
Enclosure Top	Plastic	See 4.1.2	1300	Enclosure remained intact, no crack/opening developed.
Enclosure Side	Plastic	See 4.1.2	1300	Enclosure remained intact, no crack/opening developed
Enclosure Bottom	Plastic	See 4.1.2	1300	Enclosure remained intact, no crack/opening developed.

CIA						
T.7	TABLE: Drop	test	747		N/A	
Location	n/Part Material		Thickness (mm)	Height (mm)	Observation	on
					(EW)	
Suppler	mentary information	:	,			
	TING					

T.8	TABLE: Stress relief test	Р
12 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	CTA CTA	ESTING
		TATE





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	JUG	UL 62368-1		
Clause	Requirement + Test		Result - Remark	Verdict

Location/Part	Material	Thickness	Oven Temperature	Duration	Observation
200ation/r art	Material	(mm)	(°C)	(h)	Oboorvation
Enclosure	Plastic	See 4.1.2	70	7	Enclosure remained intact, no crack/opening developed.
Supplementary inform	mation:				

Χ	TABLE: Altern	native method for determining	g minimum clearance	es distances	N/A
Clearance distance petween:		Peak of working voltage (V)	Required cl (mm)	Measur (mm	
		CIA	,		TESI
Supplem	nentary information:				
				The state of the s	
	ATESTING				
C.		CTATESTING			
		CTA			

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	.NG	UL 62368-1		
Clause	Requirement + Test		Result - Remark	Verdict

	CTA			ING			-1	_
	4.1.2 TAE	BLE: Critical compo	onents information	on	101	G	Р	
CTATES	Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard		k(s) of formity ¹⁾	
	AC ADAPTER	ShenZhen Mao TWo Power Co., Ltd	XY-1200100	Input: 100- 240Vac, 50/60Hz, 0.33A Output: 12Vdc, 1.0A	UL 62368-1	UL	(em	CTAT
	PCB	Interchangeable	Interchangeab le	V-0, 130 °C	UL 796, UL 94	UL		
	Plastic enclosure	SABIC INNOVATIVE PLASTICS B V	C6600(GG)(X) (VS)	V-0, 80°C, Thickness:1.5mm	UL94	UL	E45329	G
	Supplementary information:							
	1) Provided evide	nce ensures the ag	reed level of comp	oliance. See OD-CB2	039.			

CTATESTING CTATESTING

GTA TESTING

CTA TESTING

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

ATTACHMENT TO TEST REPORT

IEC 62368-1

U.S.A. AND CANADA NATIONAL DIFFERENCES

(AUDIO/VIDEO, INFORMATION AND COMMUNICATION TECHNOLOGY EQUIPMENT - PART 1: SAFETY **REQUIREMENTS)**

Differences according to: CSA/UL 62368-1:2019

TRF template used:.....: IECEE OD-2020-F3, Ed. 1.1

Attachment Form No.....: US_CA_ND_IEC62368_1E

Attachment Originator: UL(US)

Master Attachment: Dated 2022-03-04

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IEC 62368-1 - US and Canadian National Differences Special National Conditions based on Regulations and Other National Differences All equipment is to be designed to allow installation (1DV.1) in accordance with the National Electrical Code (NEC), ANSI/NFPA 70, the Canadian Electrical (1.3)Code (CEC), Part 1, CAN/CSA C22.1, and when applicable, the National Electrical Safety Code, IEEE C2. Also, for such equipment marked or otherwise identified, installation is allowed per the Standard for the Protection of Information Technology Equipment, ANSI/NFPA 75. This standard includes additional requirements for N/A equipment used for entertainment purposes (1DV.2.1) intended for installation in general patient care areas of health care facilities. See Annex DVB. This standard includes additional requirements for N/A equipment intended for mounting under cabinets. (1DV.2.2) See Annex DVC. IEC 62368-3 clause 5 for DC power transfer at ES1 N/A or ES2 voltage levels is considered informative. IEC (1DV.2.3) 62368-3 clause 6 for remote power feeding telecommunication (RFT) circuits is considered normative (see ITU K.50). Alternatively, equipment with RFT circuits are given in either UL 2391 or CSA/UL 60950-21. RFT-C circuits are not permitted unless the RFT-C circuit complies with RFT-V limits (≤ 200V per conductor to earth). For protection against direct lightning strikes, N/A (1DV.3)

reference is made to NFPA 780 and CAN/CSA-B72

for additional requirements.





CTATESTIN'

1 Additional requirements apply to some forms of power distribution equipment, including sub-assemblies assemblies assemblies are required to be a suitable cable type (e.g., DP, CL2) specified in the NEC. For lengths 3.05 m or less, external interconnecting cable assemblies that are not types specified in the NEC generally are required to have special construction features and identification markings. 4.6 Wire-wrap terminals have special construction and performance requirements. 4.8 (A.8.3, 4.8.45, 4.8.5) 5.4.2.3.2 Surge Arrestors and Transient Voltage Surge (5.4.2.3.2. 1) Surger Arrestors and Transient Voltage Surge (5.4.2.3.2. 1) Surger Arrestors and Transient Voltage Surge (5.4.2.3.2. 1) Suppressors installed external to the equipment are required to comply with the appropriate NEC and CEC requirements. 5.5.9 Receptacles, rated 125-V, single phase, 15- or 20-A accessible to either ordinary, instructed, or skilled persons are required to be provided with GFCI Protection for Personnel if the equipment containing the receptacles is installed outdoors. The protection devices are required to comply with the equipment containing the receptacles is installed outdoors. The protection devices are required to comply with the protection devices are required to comply with the minimum conductor sizes in Table G.7, except as required by Table G.7ADV.1 for cord connected equipment, or Annex DVH for permanently connected equipment, or Annex DVH for permanently connected equipment. 5.7.8 (5.7.8.1) Equipment intended to receive telecommunication ringing signals is required to comply with a special touch current measurement tests.		UL 62368-1		
DV.5 power distribution equipment, including subassemblies A.1	Clause	Requirement + Test	Result - Remark	Verdict
DV.5 power distribution equipment, including subassemblies A.1		TEST	1	
interconnecting cable assemblies are required to be a suitable cable type (e.g., DP, CL2) specified in the NEC. For lengths 3.05 m or less, external interconnecting cable assemblies that are not types specified in the NEC generally are required to have special construction features and identification markings. 4.6 Wire-wrap terminals have special construction and performance requirements. 4.8 (coin / button cell batteries have modified special construction and performance requirements. 4.8.1.5, 4.8.4.5, 4.8.5) 5.4.2.3.2 Surge Arrestors and Transient Voltage Surge (5.4.2.3.2. Suppressors installed external to the equipment are required to comply with the appropriate NEC and CEC requirements. 5.5.9 Receptacles, rated 125-V, single phase, 15- or 20-A accessible to either ordinary, instructed, or skilled persons are required to be provided with GFCI Protection for Personnel if the equipment containing the receptacles is installed outdoors. The protection devices are required to comply with UL 943, and CAN/CSA C22.2 No.144. 5.6.3 Protective earthing conductors comply with the minimum conductor sizes in Table G.7, except as required by Table G.7ADV.1 for cord connected equipment, or Annex DVH for permanently connected equipment intended to receive telecommunication ringing signals is required to comply with a special touch current measurement tests.	1 (DV.5)	power distribution equipment, including sub-	ESTING	N/A
a suitable cable type (e.g., DP, CL2) specified in the NEC. For lengths 3.05 m or less, external interconnecting cable assemblies that are not types specified in the NEC generally are required to have special construction features and identification markings. 4.6 (4.6.2) Wire-wrap terminals have special construction and performance requirements. 4.8 (4.8.3, 4.8.4.5, 4.8.5) 4.8.5.) 5.4.2.3.2 Surge Arrestors and Transient Voltage Surge (5.4.2.3.2. 1) Suppressors installed external to the equipment are required to comply with the appropriate NEC and CEC requirements. 5.5.9 Receptacles, rated 125-V, single phase, 15- or 20-A accessible to either ordinary, instructed, or skilled persons are required to be provided with GFCI Protection for Personnel if the equipment containing the receptacles is installed outdoors. The protection devices are required to comply with UL 943, and CAN/CSA C22.2 No.144. 5.6.3 Protective earthing conductors comply with the minimum conductor sizes in Table G.7, except as required by Table G.7ADV.1 for cord connected equipment, or Annex DVH for permanently connected equipment intended to receive telecommunication ringing signals is required tests.			CTA CTA	N/A
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CTATES!!		Equipment intended to receive telecommunication ringing signals is required to comply with a special	-ING	N/A
CONT.		(EV)	CTATESTIN	•
			(EVA	

	UL 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
	EST		
6.5.1	PS3 wiring outside a fire enclosure is required to		N/A
NA.	comply with single fault testing in B.4, or be current		IN/A
	limited per one of the permitted methods.	-ING	
Annex F	Output terminals provided for supply of other	TEST!	N/A
	equipment, except mains supply, are required to be	STATE	IN/A
(F.3.3.9)	marked with a maximum rating or reference to	Carlo Cir	
	equipment permitted to be connected.		
Annex F	Outdoor Enclosures are required to be classified		N/A
(F.3.7)	and marked in accordance with UL 50 or 50E, or		IWA
III	CAN/CSA C22.2 No. 94.1 or 94.2.		No west the
Annex G	Permanent connection of equipment to the mains		N/A
(G.7)	supply by a power supply cord is not permitted,		1,47.
	except for certain equipment, such as ATMs.		
	Power supply cords are required to have attachment	TING	N/A
	plugs rated not less than 125 percent of the rated	2,	
	current of the equipment.		AIT.
	Flexible power supply cords are required to be		N/A
	compatible with Article 400 of the NEC, and Tables		7
	11 and 12 of the CEC. Minimum cord length is required to be 1.5 m, with		
	certain constructions such as external power		N/A
	supplies allowed to consider both input and output		
	cord lengths into the requirement. Power supply		
	cords are required to be no longer than 4.5 m in		
	length if used in ITE Rooms.		
	Power supply cords for outdoor equipment are		N/A
	required to be suitable outdoor use type as required	as G	1,7,1
	by Section 400.4 of the NEC and Rule 4-012 of the	STIN	
	CEC, i.e., marked "W."	TATES	
Annex H.2	Continuous ringing signals under normal operating	CI	N/A
	conditions up to 16 mA only are permitted if the		
	equipment is subjected to special installation and performance restrictions.		a contract of the contract of
Annex H.4	For circuits with other than ringing signals and with		
Alliex II.4	voltages exceeding 42.4 Vpeak or 60 Vd.c., the		N/A
	maximum acceptable current through a 2000 ohm		
	resistor (or greater) connected across the voltage		
	source with other loads disconnected is 7.1 mA	. 6	
	peak or 30 mA d.c. under normal operating	CTING	
	conditions.	2.	
Annex Q	Equipment with paired conductor and/or coax		N/A
(Q.3)	communications cables/wiring connected to building		TES
	wiring are required to have special voltage, current,	CT	*
Λ	power and marking requirements. Equipment that is designed such that it may be		B 1 / A
Annex	powered from a separate electrical service, is	111111111111111111111111111111111111111	N/A
DVA	required to meet applicable requirements for service		
(1)	equipment for control and protection of services and		
	their installation and complies with Article 230 of the		
	National Electrical Code (NEC), NFPA 70 and		
	Section 6 of the Canadian Electrical Code, Part I,		
	CSA C22.1.	-14G	
		CTA TESTING	
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	Clause	Requirement + Test	Result - Remark	Verdict
		EST		
	CAR	Equipment intended for use in spaces used for environmental air (plenums) are subjected to special flammability requirements for heat and visible smoke release.	TESTING	N/A
	TING	For ITE room applications, automated information storage systems with combustible media greater than 0.76 m³ (27 cu ft) are required to have a provision for connection of either automatic sprinklers or a gaseous agent extinguishing system with an extended discharge.	CTA I	N/A
TATES		Consumer products designed or intended primarily for children 12 years of age or younger are subject to additional requirements in accordance with U.S. and Canadian Regulations.	JG	N/A
		Baby monitors are required to additionally comply with ASTM F2951, Consumer Safety Specification for Baby Monitors.	STIL	N/A
		Storage batteries and battery management equipment, other than associated with lead-acid batteries, and including battery backup systems that are not an integral part of stationary AV and ICT equipment, such as provided in separate cabinets, are required to be certified (listed) to the appropriate standard(s) for such storage batteries and equipment.	CTA.	N/A
	Annex DVA (5.6)	For Pluggable Equipment Type A, the protection in the installation is assumed to be 20A.	ESTING	N/A
	Annex DVA (6.3)	The maximum quantity of flammable liquid stored in equipment is required to comply with NFPA 30.	CTA CTA	N/A
CTATES	Annex DVA (6.4.8)	For ITE room applications, enclosures with combustible material measuring greater than 0.9 m ² (10 sq ft) or a single dimension greater than 1.8 m (6 ft) are required to have a flame spread rating of 50 or less. For equipment with the same dimensions for other applications, an external surface that is not a fire enclosure requires a minimum flammability classification of V-1.	STING	N/A
	Annex DVA (10.3)	Equipment with lasers is required to meet the U.S. Code of Federal Regulations 21 CFR 1040 (and the Canadian Radiation Emitting Devices Act, REDR C1370).	GON CTA	N/A
	Annex DVA (10.5)	Equipment that produces ionizing radiation is required to comply with the U.S. Code of Federal Regulations, 21 CFR 1020 (and the Canadian Radiation Emitting Devices Act, REDR C1370).		N/A

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	UL 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
	TEST		
Annex DVA (F.3.3.4)	Equipment for use on a.c. mains supply systems with a neutral and more than one phase conductor (e.g. 120/240 V, 3-wire) require a special marking format for electrical ratings. Additional considerations apply for voltage ratings that exceed the attachment cap rating or that are lower than the "Normal Operating Condition" in Table 2 of CAN/CSA	CTA TESTING	N/A
	C22.2 No. 235."		
Annex DVA (F.3.3.6)	Equipment identified for ITE (computer) room installation is required to be marked with the rated current.		N/A
Annex DVA (G.1)	Vertically-mounted disconnect switches and circuit breakers are required to have the "on" position indicated by the handle in the up position, where mounted in an enclosure, vertically mounted disconnect switches and circuit breakers with vertical operating means extending outside the enclosure are required to indicate in a location visible when accessing the external operating means whether the switch or circuit breaker is in the open (off) or closed (on) position.	STING	N/A
Annex DVA G.3.4)	Suitable NEC/CEC branch circuit protection rated at the maximum circuit rating is required for all standard supply outlets and receptacles (such as supplied in power distribution units) if the supply branch circuit protection is not suitable.	TESTING	N/A
	Where a fuse is used to provide Class 2 or Class 3 current limiting, it is not operator-accessible unless it is non-interchangeable.	CTA CTA	N/A
Annex DVA (G.4.2)	Equipment with isolated ground (earthing) receptacles is required to comply with NEC 250.146(D) and CEC 10-400 and 10-612.		N/A
Annex DVA (G.4.3)	Interconnection of units by conductors supplied by a limited power source, or a Class 2 circuit defined in the NEC/CEC may have field wiring connections other than specified in DVH.3, such as wire-wrap and crimp-on types, if the limited power source and Class 2 circuits are separated from all other circuits by barriers, routing or fixing.	STING	N/A
Annex DVA (G.5.3)	Power distribution transformers distributing power at 100 volts or more, and rated 10 kVA or more, require special transformer overcurrent protection.	GIN CTA	N/A
Annex	Motor control devices are required for cord-connected equipment with a mains-connected		N/A



	UL 62368-1	1	
Clause	Requirement + Test	Result - Remark	Verdict
	LES.		
Annex DVA (G.7)	Flexible cords used outdoors are required to have the suffix "W" marked on the flexible cord.		N/A
Annex DVA (M)	For ITE room applications, equipment with battery systems capable of supplying 750 VA for five minutes are required to have a battery disconnect	CTATESTING	N/A
	means that may be connected to the ITE room remote power-off circuit.		110
Annex DVA (Q)	If applicable per NEC 725.121(C), some limited power sources supplied from AV/ICT equipment are required to have a label indicating the maximum voltage and rated current output for per conductor for each connection point. Where multiple connection points have the same rating, a single label is permitted to be used.	ETING	N/A
	Wiring terminals intended to supply Class 2 outputs in accordance with the NEC or CEC Part 1are required to be marked with the voltage rating and "Class 2" or equivalent. The marking is located adjacent to the terminals and visible during wiring.	GA (N/A
	Applicable parts of Chapter 8 of the NEC, and Rules 54 and 60 of the CEC, may be applicable to ITE installed outdoors with connections to communication systems.		N/A
Annex DVB (1)	Additional requirements apply for equipment used for entertainment purposes intended for installation in general patient care areas of health care facilities.	-140	N/A
Annex DVC (1)	Additional requirements apply for equipment intended for mounting under kitchen cabinets.	CTATES	N/A
Annex DVE (4.1.1)	Some equipment, components, sub-assemblies and materials associated with the risk of fire, electric shock, or personal injury are required to have component or material ratings in accordance with the applicable national (U.S. and Canadian) component or material requirements. These equipment and components include: appliance		N/A
	couplers, attachment plugs, battery backup systems, circuit breakers, communication circuit accessories, connectors (used for current interruption of non-LPS circuits), direct plug-in equipment, electrochemical capacitor modules (energy storage modules with ultracapacitors), enclosures (outdoor), flexible cords and cables, fuses (branch circuit), ground-fault current interrupters, interconnecting cables, modular data	STING	TATESTIN
CTA	centres, power supply cords, some power distribution equipment, printed wiring, protectors for communications circuits, receptacles, surge protective devices, vehicle battery adapters, wire connectors, and wire and cables.		
Annex DVH	Equipment for permanent connection to the mains supply is subjected to additional requirements.	GTING	N/A
216	Takkiy io addicored to additional requirements.	CTATES	(Em)

	UL 62368-1	T	
Clause	Requirement + Test	Result - Remark	Verdict
	LE2,		
Annex DVH (DVH.1)	Wiring methods (terminals, leads, etc.) used for the connection of the equipment to the mains are required to be in accordance with the NEC/CEC.	ESTING	N/A
Annex DVH (DVH.2.1)	For safe and reliable connection to a mains, permanently connected equipment is to be provided.	CTA TA	N/A
Annex DVH (DVH.2.2)	Additional considerations for D.C. mains.		N/A
Annex DVH (DVH.3.2.1)	Terminals for permanent wiring, including protective earthing terminals, are required to be suitable for U.S./Canadian wire gauge sizes, rated 125 percent of the equipment rating, and be specially marked when specified.	STING	N/A
Annex DVH (DVH.3.2.3)	Wire binding screws are not permitted to attach conductors larger than 10 AWG (5.3 mm ²).	- c1	N/A
Annex DVH (DVH.3.2.4	All associated mains supply terminals are located in proximity to each other and to the main protective earthing terminal, if any.	GIA C	N/A
Annex DVH (DVH.3.2.5	Terminals are located, guarded or insulated so that, should a strand of a conductor escape when the conductor is fitted, there is no likelihood of accidental contact between such a strand and accessible conductive parts or unearthed conductive parts separated from accessible conductive parts by supplementary insulation only.	CTATESTING	N/A
Annex DVH (DVH.3.3)	When field connection to an external circuit is via wires (example, free conductors), the wires are not smaller than 18 AWG (0.82 mm²) and the free length of the wire inside an outlet box or wiring compartment is 150 mm or more.		N/A
Annex DVH (DVH.3.4)	Size of protective earthing conductors and terminals	(See sub-clause 5.6.5)	N/A
Annex DVH (DVH.4)	Permanently connected equipment is required to have a suitable wiring compartment and wire bending space.	STING	N/A
Annex DVH (DVH.4.1)	Wire bending space	CTP CTP	N/A
Annex DVH (DVH.4.2)	Volume of wiring compartment		N/A
Annex DVH (DVH.4.3)	Separation of circuits		N/A
Annex DVH (DVH.5)	Equipment markings and instructional safeguards	TATESTING	N/A
		Car.	

	UL 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
	(ES)		
Annex DVH (DVH.5.1)	Identification of protective earthing terminal	-ING	N/A
Annex DVH (DVH.5.2)	Identification of terminal for earthed conductor (neutral)	CTATEST	N/A
Annex DVH (DVH.5.3)	Identification of terminals for aluminium conductors		N/A
Annex DVH (DVH.5.4)	Wire temperature ratings		N/A
Annex DVH (DVH 5.5)	Equipment connected to a centralized d.c. power system, and having one pole of the DC mains input terminal connected to the main protective earthing terminal in the equipment, is required to comply with special earthing, wiring, marking and installation instruction requirements.	STING	N/A
Annex DVI (6.7)	Equipment intended for connection to telecommunication network outside plant cable is required to be protected against overvoltage from power line crosses.	CAN CAN	N/A
Annex DVJ (10.6.1)	Equipment connected to a telecommunication and cable distribution networks and supplied with an earphone intended to be held against, or in the ear is required to comply with special acoustic pressure requirements.		N/A
	power line crosses. Equipment connected to a telecommunication and cable distribution networks and supplied with an earphone intended to be held against, or in the ear is required to comply with special acoustic pressure	CTATESTING	N

CTATESTING

CTATESTING

	Ul	_ 62368-1	
Clause	Requirement + Test	Result - Remark	Verdict

Clause	Requirement + Test	Result - Remark	verdict
	TE3'		
ZC	ANNEX ZC, NATIONAL DEVIATIONS (EN)		
10.5.2	Germany	TING	N/A
	The following requirement applies:	TATES	
		G C	
	For the operation of any cathode ray tube intended for the display of visual images operating at an	O Comment	Ltd
	acceleration voltage exceeding 40 kV,		THE STATE OF THE S
TING	authorization is required, or application of type		To negurity
2	approval (Bauartzulassung) and marking.		
	Justification:		
	German ministerial decree against ionizing	·G	
	radiation (Röntgenverordnung), in force since	STING	
	2002-07-01, implementing the European Directive	ES	- (
	96/29/EURATOM.		STIN
	NOTE Contact address:		ATES
	Physikalisch-Technische Bundesanstalt, Bundesallee 100, D-38116 Braunschweig,	C	1
	Tel.: Int+49-531-592-6320, Internet: http://www.ptb.de		

ZD IEC and CENELEC CODE DESIGNATIONS FOR FLEXIBLE CORDS (EN)

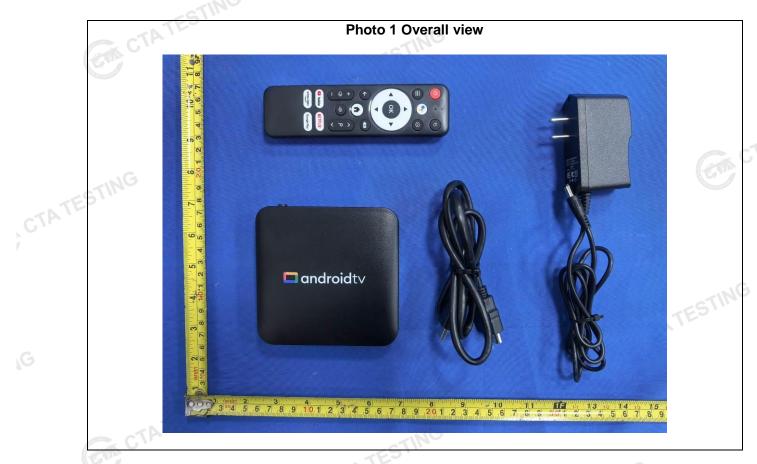
N/A



		UL 62368-1		
Clause	Requirement + Test		Result - Remark	Verdict
-50	TEST	nG.		

Type of flexible cord	Code de	signations] N/A	
	IEC	CENELEC		
PVC insulated cords				
Flat twin tinsel cord	60227 IEC 41	H03VH-Y		
Light polyvinyl chloride sheathed flexible cord	60227 IEC 52	H03VV-F H03VVH2-F		
Ordinary polyvinyl chloride sheathed flexible cord	60227 IEC 53	H05VV-F H05VVH2-F		
Rubber insulated cords				
Braided cord	60245 IEC 51	H03RT-F		
Ordinary tough rubber sheathed flexible cord	60245 IEC 53	H05RR-F		
Ordinary polychloroprene sheathed flexible cord	60245 IEC 57	H05RN-F	1	
Heavy polychloroprene sheathed flexible cord	60245 IEC 66	H07RN-F		
Cords having high flexibility	•			
Rubber insulated and sheathed cord	60245 IEC 86	H03RR-H		
Rubber insulated, crosslinked PVC sheathed cord	60245 IEC 87	H03 ₹V4-H		
Crosslinked PVC insulated and sheathed cord	60245 IEC 88	H03V4V4-H		
Cords insulated and sheathed with halogen- free thermoplastic compounds				
Light halogen-free thermoplastic insulated and sheathed flexible cords		H03Z1Z1-F H03Z1Z1H2-F		
Ordinary halogen-free thermoplastic insulated and sheathed flexible cords		H05Z1Z1-F H05Z1Z1H2-F	No.	

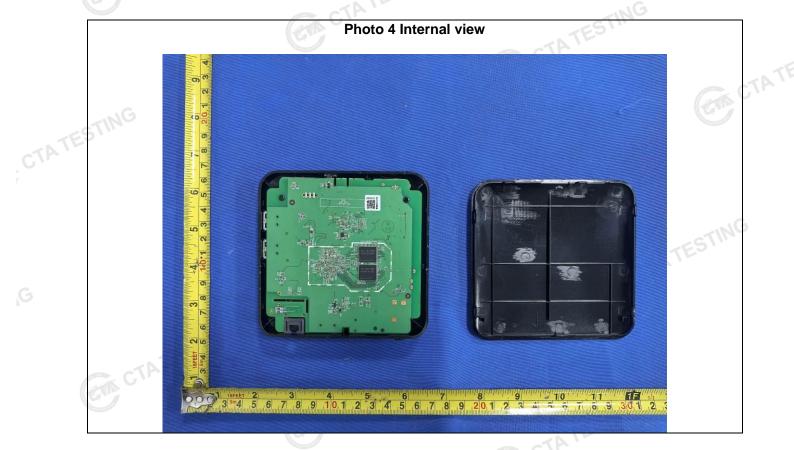




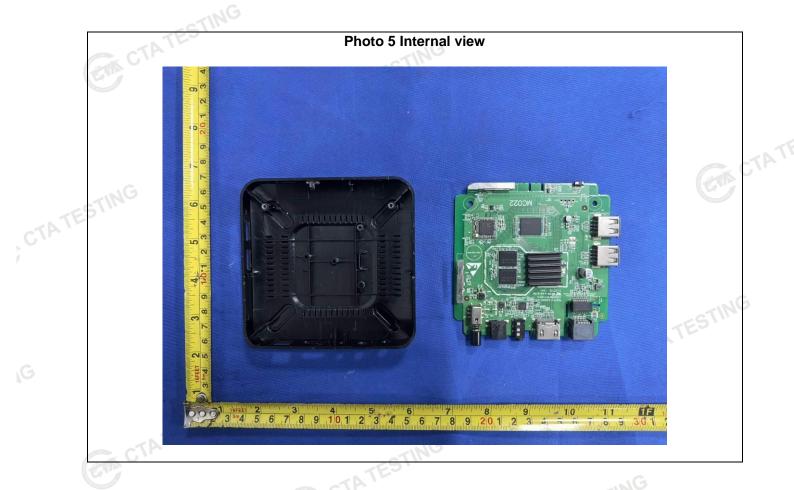




















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