

**TEST REPORT****IEC 60598-1 & IEC 60598-2-4****Luminaires****Part 2: Particular requirements****Section Four - Portable general purpose luminaires**

Report reference No.....: ZKT-2609150907S

Date of issue.....: Sept. 20, 2026

Total number of pages.....: 51 pages

Testing Laboratory Name : **Shenzhen ZKT Technology Co., Ltd.**

Address: 1/F, No. 101, Building B, No. 6, Tangwei Community Industrial Avenue, Fuhai Street, Bao'an District, Shenzhen, China

Applicant's Name : **Advanced Health Solutions B.V.**

Address: Veerstraat 13A 1404CG, Bussum Noord-Holland The Netherlands

Test specificationStandard.....: EN 60598-2-4:2018 used in conjunction with
EN IEC 60598-1: 2024+A11:2024

Test procedure: Type test

Non-standard test method.....: N/A

TRF template used..... : IEC EE OD-2020-F1:2024, Ed.1.7**Test Report Form No.....** : IEC60598_2_4J**Test Report Form(s) Originator.....** : UL Solutions (Demko)**Master TRF.....** : Dated 2025-09-16**Copyright © 2025 IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (IECEE System). All rights reserved.**

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Test item description : LED THERAPY LIGHT**Trademark** : **Manufacturer.....** : Advanced Health Solutions B.V.

Veerstraat 13A 1404CG, Bussum Noord-Holland The Netherlands

Model and/or type reference : ATP Pure 1500

ATP Pure 700, ATP Pure 300

Rating(s)..... : Input :100-240V~, 50/60Hz, 432W, 1.8-4.32A



Testing procedure and testing location:

Testing Laboratory.....: **Shenzhen ZKT Technology Co., Ltd.**

Address.....: 1/F, No. 101, Building B, No. 6, Tangwei Community
Industrial Avenue, Fuhai Street, Bao'an District,
Shenzhen, China

Date of Test.....: Sept. 09, 2026 to Sept. 20, 2026

Tested by (name + signature).....: Bowers. Zhang

Reviewer by (name + signature).....: Peter Huang

Approved by (name + signature).....: Awen He





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

- Attachment I: 1 pages for EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES.
- Attachment II: 11 pages for Photo documentation.

Summary of testing:

Tests performed (name of test and test clause):

EN IEC 60598-1: 2024+A11:2024
EN 60598-2-4:2018

Testing location:

Shenzhen ZKT Technology Co., Ltd.
1/F, No. 101, Building B, No. 6, Tangwei
Community Industrial Avenue, Fuhai Street, Bao'an
District, Shenzhen, China

Copy of marking plate:

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

LED THERAPY LIGHT
Model: ATP Pure 1500
Input :100-240V~, 50/60Hz, 432W, 1.8-4.32A



Manufacturer: Advanced Health Solutions B.V.

Remark on above marking:

1. Height of WEEE mark at least 7mm, height of other marks at least 5mm, height of letters and numerals atleast 2mm.
2. The height of CE symbols is more than 5 mm;



Test item particulars..... :	
Classification of installation and use.....: Portable luminaires; Normal use	
Supply Connection.....: supply cords with plugs	
.....:	
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..... : Sept. 09, 2026	
Date (s) of performance of tests..... : Sept. 09, 2026 to Sept. 20, 2026	
.....	
General remarks:	
"(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report.	
Throughout this report a ☐ comma / ☒ point is used as the decimal separator.	
Clause numbers between brackets refer to clauses in IEC 60598-1	
Manufacturer's Declaration per sub-clause 4.2.5 of IEC 60598-1:	
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided.....:	☐ Yes ☒ Not applicable
General product information and other remarks:	
1. All the test results comply with the requirement of relevant standards. 2. All the model are the same circuit , only the model name are different.	



IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict

4.4 (4)	GENERAL TEST REQUIREMENTS		P
4.4 (4.1.2)	More parts of IEC 60598-2 series applicable..... :	Yes ☐ No ☒	—
	Part(s)..... :		—
4.4 (4.2)	Batteries or EDLCs operated luminaire	(see Annex 5)	N/A
4.4 (4.3)	Components	(see Annex 1)	—
4.4 (4.4)	Information for luminaire design in light sources standards		—
4.4 (4.4.2)	Light source and/or controlgear safety standard	IEC 62031 IEC 62471	—
	Luminaire design in the light source and/or controlgear safety standard		P

4.5 (5)	CLASSIFICATION OF LUMINAIRES		P
4.5 (5.2)	Type of protection	Class I	P
4.5 (5.3)	Degree of protection.....	IP20	—
4.5 (5.4)	Luminaire suitable for direct mounting on normally flammable surfaces.....	Yes ☒ No ☐	—
4.5 (5.5)	Luminaire for normal use	Yes ☒ No ☐	—
	Luminaire for rough service	Yes ☐ No ☒	—
4.5.1 (-)	Ordinary luminaire classified “for indoor use only”.....	Yes ☒ No ☐	—
	Luminaires other than ordinary classified “for indoor use only”.....	Yes ☐ No ☒	—
	Luminaires other than ordinary classified for “outdoor use” and “for indoor use”.....	Yes ☒ No ☐	—
4.5.2 (-)	Portable luminaire for outdoor use classified IPX4 or higher		N/A
4.5.3 (-)	Luminaires designed for standing on a floor or table classified as suitable for direct mounting on normally flammable surfaces		P

4.6 (6)	MARKING		P
4.6 (6.1)	Language of instructions		P
4.6 (6.2)	Marking on luminaire		P
	Position of the marking	On the enclosure	P
	Format of symbols/text	Symbols>5mm Text>2mm	P
4.6 (6.3)	Information on luminaire		N/A
4.6 (6.4)	Additional information		N/A
4.6 (6.4.2)	Combination luminaires	Not combination luminaire	N/A



IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
4.6 (6.4.3)	Rated frequency in Hz	50/60	P
4.6 (6.4.4)	Operating temperature	See user manual	P
4.6 (6.4.5)	Wiring diagram		P
4.6 (6.4.6)	Special conditions		N/A
4.6 (6.4.7)	Metal halide lamp luminaire – warning		N/A
4.6 (6.4.8)	Limitation for semi-luminaires		N/A
4.6 (6.4.9)	Power factor and supply current	1.8-4.32A	P
4.6 (6.4.10)	Luminaires using remote controlgear		N/A
4.6 (6.4.11)	Clip-mounted luminaire – warning		N/A
4.6 (6.4.12)	Specifications of protective shields		N/A
4.6 (6.4.13)	Rough service luminaire		N/A
4.6 (6.4.14)	Mounting instruction for type Y, type Z and some type X attachments	type X	P
4.6 (6.4.15)	Non-ordinary luminaires with PVC cable		N/A
4.6 (6.4.16)	Protective conductor current in instruction if applicable		N/A
4.6 (6.4.17)	Provided with information if not intended to be mounted within arm's reach		N/A
4.6 (6.4.18)	Non replaceable, non-user replaceable and replaceable light sources information provided	Non replaceable light sources	P
4.6 (6.4.19)	Controllable luminaires, classification of insulation provided		N/A
4.6 (6.4.20)	Luminaires without controlgear provided with necessary information for selection of appropriate component		N/A
4.6 (6.4.21)	If not supplied with terminal block, information on the packaging		N/A
4.6 (6.4.22)	Luminaires employing light sources emitting UV on mains wiring, information provided		N/A
4.6 (6.4.23)	Wall mounted luminaire using external flexible cable or cord longer than 0.3 m, information provided		N/A
4.6 (6.4.24)	Information for replacement or non-replacement of controlgear provided		N/A
4.6 (6.5)	Test of marking		P
	Test with water	15s with water	P
	Test with hexane	15s with hexane	P
	Legible after test	The marking is legible	P



IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
	Label attached	The marking not be easily removable and shows no cuving	P
4.6.1 (-)	Luminaire not suitable for outdoor application		P
	Required symbol		P
	Information in the instructions		N/A
4.6.2 (-)	Outdoor use, socket outlet incorporated in the luminaire		N/A
	Maximum power rating marked		N/A
	Position of the marking		N/A

4.7 (7)	CONSTRUCTION		P
4.7 (7.2)	Components replaceable or serviceable without difficulty		P
4.7 (7.3)	Wireways smooth and free from sharp edges		P
4.7 (7.4)	Lamp holders		N/A
4.7 (7.4.1)	Integral lamp holder	No lampholder	N/A
4.7 (7.4.2)	Wiring connection		N/A
4.7 (7.4.3)	Lamp holder for end-to-end mounting		N/A
4.7 (7.4.4)	Positioning		N/A
	- pressure test (N)		—
	After test the lamp holder comply with relevant standard sheets and show no damage		N/A
	After test on single-capped lamp holder the lamp holder has not moved from its position and show no permanent deformation		N/A
	- bending test (N)		—
	After test the lamp holder has not moved from its position and show no permanent deformation		N/A
4.7 (7.4.5)	Peak pulse voltage		N/A
4.7 (7.4.6)	Centre contact		N/A
4.7 (7.4.7)	Parts in rough service luminaires resistant to tracking		N/A
4.7 (7.4.8)	Lamp connectors		N/A
4.7 (7.4.9)	Caps and bases correctly used		N/A
4.7 (7.4.10)	Light source for lamp holder or connection according to IEC 60061 not connected another way		N/A
4.7 (7.5)	Starter holders		N/A
	Starter holder in luminaires other than class II	No starter	N/A



IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
	Starter holder class II construction		N/A
4.7 (7.6)	Terminal blocks		N/A
	Connecting leads (tails)		N/A
	Unsecured blocks		N/A
4.7 (7.7)	Terminals and supply connections		P
4.7 (7.7.1)	Contact to metal parts		N/A
4.7 (7.7.2)	Test 8 mm hazardous live conductor		N/A
	Test 8 mm earth conductor		N/A
4.7 (7.7.3)	Terminals for supply conductors		N/A
4.7 (7.7.4)	Welded method and material		N/A
	- stranded or solid conductor		N/A
	- spot welding		N/A
	- type Y and Z attachment		N/A
	- mechanical test according to 17.5.2		N/A
	- electrical test according to 17.5.3		N/A
	- heat test according to 17.5.3.3.4 and 17.5.3.3.5		N/A
4.7 (7.7.5)	Terminals other than supply connection		P
4.7 (7.7.6)	Heat-resistant wiring/sleeves		N/A
4.7 (7.7.7)	Multi-pole plug		N/A
	- test at 30 N		N/A
4.7 (7.8)	Switches		P
	- adequate rating		P
	- adequate fixing		P
	- polarized supply		N/A
	- compliance with IEC 61058-1-1 or IEC 60669-1 for mechanical switches		P
	- compliance with IEC 61058-1-2 or IEC 60669-1 for electronic switches		N/A
	- compliance with IEC 61058-2-1 for cord switches		N/A
4.7 (7.9)	Insulating lining and sleeves		P
4.7 (7.9.1)	Retainment		P
	Method of fixing.....: By construction		P
4.7 (7.9.2)	Insulated linings and sleeves:		N/A
	Resistant to a temperature > 20 °C to the wire temperature or		N/A
	a) & c) Insulation resistance and electric strength		N/A
	b) Ageing test. Temperature (°C).....:		N/A



IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
4.7 (7.10)	Double or reinforced insulation		P
4.7 (7.10.1)	No contact, mounting surface – accessible metal parts – basic insulation	For Class II part	P
	Safe installation fixed luminaires		N/A
	Capacitors and switches		N/A
4.7 (7.10.2)	Assembly gaps:		N/A
	- not coincidental		N/A
	- no straight access with test probe		N/A
4.7 (7.10.3)	Retainment of insulation:		P
	- fixed		P
	- unable to be replaced; luminaire inoperative		P
	- sleeves retained in position		P
	- lining in lamp holder		P
4.7 (7.10.4)	Protective impedance device:		N/A
	Basic or supplementary insulation bridged by resistor(s) or appropriate capacitor		N/A
	Double or reinforced insulation bridged by at least two separate resistors in series or appropriate capacitor(s)		N/A
	Capacitors comply with IEC 60384-14		N/A
	Resistors comply with IEC 62368-1:2018, Clause G.10.		N/A
4.7 (7.11)	Electrical connections and current-carrying parts		P
4.7 (7.11.1)	Contact pressure		P
4.7 (7.11.2)	Screws:		N/A
	- self-tapping screws		N/A
	- thread-cutting screws		N/A
4.7 (7.11.3)	Screw locking:		P
	- spring washer		P
	- rivets		N/A
4.7 (7.11.4)	Material of current-carrying parts		P
	FELV, SELV or PELV supplying circuits with load less than 15 W and current not higher than 2 A		P
4.7 (7.11.5)	No contact to wood or mounting surface		P
4.7 (7.11.6)	Electro-mechanical contact systems		N/A
4.7 (7.12)	Screws and connections (mechanical) and glands		P
4.7 (7.12.1)	Screws not made of soft metal		P
	Screws of insulating material		N/A



IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
	Torque test: torque (Nm); part..... :	Screw of enclosure: 2.0Nm	P
	Torque test: torque (Nm); part..... :		N/A
	Torque test: torque (Nm); part..... :		N/A
4.7 (7.12.2)	Screws with diameter < 3 mm screwed into metal		N/A
4.7 (7.12.3)	Locked connections:		N/A
	- fixed arms; torque (Nm)..... :		N/A
	- lamp holder; torque (Nm)..... :	No such fixed arms	N/A
	- push-button switches; torque 0,8 Nm..... :		N/A
4.7 (7.12.4)	Screwed glands; force (Nm)..... :	Cord anchorage Gland: 2.5 Nm	P
4.7 (7.13)	Mechanical strength		P
4.7 (7.13.1)	Impact tests:		P
	- fragile parts; energy (Nm)..... :		N/A
	- other parts; energy (Nm)..... :	Enclosure: 0.7 Nm	P
	1) live parts		P
	2) linings		N/A
	3) protection	Continue to afford the degree of protection against ingress of dust, solid objects and moisture	P
	4) covers	No break	P
4.7 (7.13.2)	Metal parts have adequate mechanical strength		N/A
4.7 (7.13.3)	Test with straight unjointed test finger		N/A
4.7 (7.13.4)	Tumbling barrel		N/A
4.7 (7.14)	Suspensions, fixings and means of adjusting		P
4.7 (7.14.1)	Mechanical load:		N/A
	A) four times the weight		N/A
	B) torque 2,5 Nm		N/A
	C) bracket arm; bending moment (Nm)..... :		N/A
	D) load track-mounted luminaires		N/A
	E) clip-mounted luminaires, glass-shelve. Thickness (mm)		N/A
	Metal rod. diameter (mm)		N/A
	Fixed luminaire or independent controlgear without fixing devices		N/A
	Magnets not used as the primary fixing		N/A
4.7 (7.14.2)	Load to flexible cables:		N/A
	Mass (kg)		—
	Stress in conductors (N/mm ²)		N/A



IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
	Special cable or cord, force applied (N).....:		N/A
	Mass (kg) of semi-luminaire		N/A
	Bending moment (Nm) of semi-luminaire		N/A
4.7 (7.14.3)	Adjusting devices:		N/A
	- flexing test; number of cycles.....:		N/A
	- strands broken.....:		N/A
	- insulation resistance and electric strength tests afterwards		N/A
4.7 (7.14.4)	Telescopic tubes: cords not fixed to tube; no strain on conductors		N/A
4.7 (7.14.5)	Guide pulleys		N/A
4.7 (7.14.6)	Strain on socket-outlets		N/A
4.7 (7.15)	Flammable materials		P
	- glow-wire test 650°C.....:	See Test Table 4.16 (15.3.3)	P
	- spacing ≥ 30 mm		N/A
	- screen withstanding test of 15.3.2		N/A
	- screen dimensions		N/A
	- no fiercely burning material		P
	- thermal protection		N/A
	- electronic circuits exempted		N/A
4.7 (7.15.2)	Luminaires made of thermoplastic material with controlgear:		N/A
	a) construction		N/A
	b) temperature sensing control		N/A
	c) surface temperature		N/A
4.7 (7.16)	Luminaires for mounting on normally flammable surfaces		P
4.7 (7.16.1)	No controlgear.....:	(compliance with Clause 14)	P
	Provided with adaptor for a track meet the requirements for direct mounting on normally flammable surfaces		N/A
4.7 (7.16.2)	Controlgear spacing:		N/A
	- spacing 35 mm		N/A
	- spacing 10 mm		N/A
1.7 (7.16.3)	Thermal protection:		N/A
	- in controlgear		N/A
	- external		N/A
	- fixed position		N/A
	- temperature marked controlgear		N/A



IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
4.7 (7.16.4)	Design to satisfy the test of 14.6	(see 14.6)	N/A
4.7 (7.17)	Drain holes		N/A
	Clearance at least 5 mm		N/A
4.7 (7.18)	Resistance to corrosion		P
4.7 (7.18.1)	- rust-resistance		P
4.7 (7.18.2)	- season cracking in copper		P
4.7 (7.18.3)	- corrosion of aluminium		N/A
4.7 (7.19)	Ignitors compatible with ballast		N/A
4.7 (7.20)	Rough service luminaires		N/A
4.7 (7.20.1)	Resistance to vibrations		N/A
4.7 (7.20.2)	IP54 or higher		N/A
	a) fixed		N/A
	b) hand-held		N/A
	c) delivered with a stand		N/A
	d) for temporary installations and suitable for mounting on a stand		N/A
4.7 (7.21)	Protective shield		N/A
4.7 (7.21.1)	Shield fitted if tungsten halogen lamps or metal halide lamps		N/A
	Shield of glass if tungsten halogen lamps		N/A
4.7 (7.21.2)	Particles from a shattering lamp not impair safety		N/A
4.7 (7.21.3)	No direct path		N/A
4.7 (7.21.4)	Impact test on shield		N/A
	Glow-wire test on lamp compartment.....:	See Test Table 4.16 (15.3.3)	N/A
4.7 (7.22)	Attachments to lamps		N/A
	Attachments to lamps do not cause overheating or damage		N/A
4.7 (7.23)	Semi-luminaires		N/A
	Semi-luminaires comply Class II		N/A
4.7 (7.24)	Photobiological hazards		P
4.7 (7.24.1)	Actinic UV hazards for skin and eye 200 nm to 400 nm)		N/A
	No excessive UV radiation; luminaires used with:		N/A
	- self-shielded lamps or light sources having a UV emission $\leq 2 \text{ mW} \cdot \text{klm}^{-1}$		N/A
	- light sources emitting $\leq 6 \text{ mW} \cdot \text{klm}^{-1}$ and having a glass cover		N/A
	- light sources emitting $> 6 \text{ mW} \cdot \text{klm}^{-1}$, compliance with Annex M		N/A



IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
4.7 (7.24.2)	UV-A hazard for the eye lens (315 nm to 400 nm)		N/A
	No excessive UV-A radiation		N/A
4.7 (7.24.3)	Retinal blue light hazard		N/A
4.7 (7.24.3.2)	Luminaire assessment according to IEC 62471-7:2023		N/A
	Luminaire application group.....: ☐ BLH-A ☐ BLH-B ☐ BLH-C		—
	Blue light radiance emission limit not exceeded for application group at applicable assessment distance		N/A
	Increased assessment distance for fixed luminaire based on luminaire application applied		N/A
	Assessment distance used (m).....:		—
	Information according to clause 6.3.22 a) provided		N/A
	Luminaire assessment based on light source data		N/A
	Light source application group.....: ☐ BLH-A ☐ BLH-B ☐ BLH-C		—
	Data in accordance with luminaire application group emission limit		N/A
4.7 (7.24.3.3)	Luminaire assessment according to IEC TR 62778:2014		P
	Class of risk group assessed according to IEC TR 62778: RG0		—
	Luminaires with E_{thr} :		N/A
	a) Fixed luminaires		N/A
	- distance x m, borderline between RG1 and RG2.....:		N/A
	- marking and instruction according 6.3.22		N/A
	b) Portable and handheld luminaires		N/A
	- marking according 6.3.22 if RG1 exceeded at 200 mm according to IEC/TR 62778		N/A
	Portable luminaires for children IEC 60598-2-10 and Mains socket outlet nightlights IEC 60598-2-12 not exceed RG1 at 200 mm according to IEC TR 62778		N/A
4.7 (7.24.4)	Retinal thermal hazard (380 nm to 1400 nm)		N/A
	Not exceeding retinal thermal radiance limits		N/A
4.7 (7.24.5)	Infrared hazard for the eye (780 nm to 3000 nm)		N/A
	Not exceeding limits for IR radiation		N/A
4.7 (7.24.6)	Thermal hazard for the skin (380 nm to 3000 nm)		N/A
	Not exceeding exposure limit		—



IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
4.7 (7.25)	Mechanical hazard		P
	No sharp point or edges		P
4.7 (7.26)	Short-circuit protection		N/A
4.7 (7.26.1)	Means preventing impairing of safety of uninsulated accessible SELV / PELV parts		N/A
	Short-circuit test with test chain according 7.26.2:		N/A
	Supply source ES1 PSE		N/A
	Test chain does not melt through		N/A
	Test sample does not exceed values of Table 21 and 22		N/A
4.7 (7.27)	Terminal blocks with integrated screwless protective earthing contacts		N/A
	Test according to Annex R		N/A
	Pull test of terminal fixing (20 N)		N/A
	After test, resistance < 0,05 Ω		N/A
	Pull test of mechanical connection (50 N)		N/A
	After test, resistance < 0,05 Ω		N/A
	Voltage drop test, resistance < 0,05 Ω		N/A
4.7 (7.28)	Fixing of thermal sensing control		N/A
	Not plug-in or easily replaceable type		N/A
	Reliably kept in position		N/A
	No adhesive fixing if UV radiations from light source can degrade the fixing		N/A
	Not outside the luminaire enclosure		N/A
	Test of adhesive fixing:		N/A
	Max. temperature on adhesive material ($^{\circ}\text{C}$) :		—
	100 cycles between t min and t max		N/A
	Temperature sensing control still in position		N/A
4.7 (7.29)	Luminaires with non-replaceable light source		N/A
	Not possible to replace light source		N/A
	Hazardous live part not accessible after parts have been opened by hand or tools		N/A
4.7 (7.30)	Luminaires with non-user replaceable light source and non-user serviceable components		N/A
	If protective cover provide protection against electric shock and marked with “caution, electric shock risk” symbol:		N/A
	At least one fixing means requiring use of tool		N/A
4.7 (7.31)	Insulation between circuits		P



IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
4.7 (7.31.1)	Circuits insulated from mains supply fulfil requirements according 7.31.2 – 7.31.4		P
	Controllable luminaires requiring same level of insulation for all components, the insulation between control terminals and mains supply fulfil requirements according 7.31.2 – 7.31.4		N/A
4.7 (7.31.2)	SELV or PELV circuits		N/A
	Used SELV/PELV source		N/A
	Voltage $\leq$ ELV		N/A
	PELV connected to earth		N/A
	Insulation of SELV/PELV circuits from mains supply		N/A
	Insulation of SELV/PELV circuits from other non SELV/PELV circuits		N/A
	Insulation of SELV/PELV circuits from FELV		N/A
	Insulation of SELV/PELV circuits from other SELV/PELV circuits		N/A
	SELV/PELV circuits insulated from accessible parts according Table T.1		N/A
	Plugs not able to make any electrical contact with socket-outlets of other voltage systems		N/A
	Socket outlets do not admit plugs of other voltage systems		N/A
	Plugs and socket-outlets do not have protective conductor contact		N/A
4.7 (7.31.3)	FELV circuits		N/A
	Used FELV source		N/A
	Voltage $\leq$ ELV		N/A
	Insulating of FELV circuits from mains supply		N/A
	FELV circuits insulated from accessible parts according Table T.1		N/A
	Plugs not able to make any electrical contact with socket-outlets of other voltage systems		N/A
	Socket outlets do not admit plugs of other voltage systems		N/A
	Socket-outlets have protective conductor contact		N/A
4.7 (7.31.4)	Other circuits		P
	Other circuits insulated from accessible conductive parts according Table T.1		P
	Class II construction with equipotential bonding for protection against indirect contacts with hazardous live parts:		N/A
	- conductive parts are connected together		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	- test according 9.2.3		N/A
	- conductive part does not cause electric shock in case of insulation fault		N/A
	- equipotential bonding used in applications when one or more luminaires supplied by another		N/A
	- supplying luminaire provided with terminal for accessible conductive parts of other luminaires		N/A
	- other luminaire constructed as class I		N/A
4.7 (7.31.5)	Additional requirements for luminaires using controllable controlgear providing SELV output(s)		N/A
	Insulation between SELV output(s) of controlgear and control port meets requirements of IEC 61347-1 for interconnected controlgear		N/A
4.7 (7.32)	Overvoltage protective devices external to controlgear		N/A
4.7 (7.32.1)	SPDs comply with requirements in 7.32.2		N/A
	SPCs comply with requirements in 7.32.3		N/A
	SPDs requiring connection to earth:		N/A
	- only used in fixed luminaires		N/A
	- only connected to protective earth		N/A
4.7 (7.32.2)	Surge protective devices (SPDs)		N/A
	Compliance with IEC 61643-11		N/A
	Rated ambient temperature verified according to test in 14.4		N/A
4.7 (7.32.3)	Surge protective components (SPCs)		N/A
4.7 (7.32.3.1)	Only connected across the mains (L to L or L to N)		N/A
	Compliance with IEC 61051-2:2021 or IEC 61643-331:2020		N/A
	Compliance with requirements in 7.32.3.2 – 7.32.3.6		N/A
4.7 (7.32.3.2)	Climatic conditions		N/A
	Climatic conditions according to:		N/A
	- Option A		N/A
	- Option B		N/A
4.7 (7.32.3.3)	Maximum continuous voltage		N/A
	At least 1.25 times rated voltage of luminaire / upper voltage of rated voltage range		N/A
4.7 (7.32.3.4)	Surge capability		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	Mains supply voltage (V).....:		—
	Combination pulse (kV).....:		N/A
4.7 (7.32.3.5)	SPC resistance to fire		N/A
	Needle flame test	See Test Table 4.16 (15.3.2)	N/A
4.7 (7.32.3.6)	SPC overload test		N/A
4.7 (7.33)	Luminaire powered via information technology communication cabling		N/A
	Requirements for Class III luminaire		N/A
	Rated voltage does not exceed maximum voltage of used connector		N/A
	Luminaire does not create any hazard from overvoltage	(see Annex 2)	N/A
4.7 (7.34)	Electromagnetic fields (EMF)		P
	No harmful electromagnetic fields		P
4.7 (7.35)	Protection against moving fan blades		N/A
	Test with a standard test finger		N/A
	Test with test probe acc. to Figure 13 (IEC 61032) for portable luminaire		N/A
	Blades rounded with radius ≥ 0.5 mm and:		N/A
	-hardness less than D60 Shore		N/A
	-peripheral speed less than 15 m/s		N/A
	-input power of fan ≤ 2 W at rated voltage		N/A
4.7 (7.36)	Track-mounted luminaires		N/A
	Test in accordance with Annex A of IEC 60570:2003/AMD2:2019		N/A
4.7.1 (-)	Insulation not damaged when moving, adjusting or placing on support		P
4.7.2 (-)	Wiring fixed, to avoid rubbing		P
	Carrier or clips of insulation material or with insulating lining		P
4.7.3 (-)	Luminaire does not overturn:		P
	- at an angle of 6° for indoor use		P
	- at an angle 15° for outdoor use		N/A
4.7.4 (-)	Candlestick luminaires provided with switch		N/A
	Switch in candlestick luminaires with E5 or E10 lampholders switches all lamps on and off simultaneously		N/A
	Switch part of the luminaire or within 300 mm of the luminaire if with cord		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
4.7.5 (-)	Voltage not exceeding 25 V for E5 lampholders		N/A
	E10 lampholder voltage:		N/A
	- not exceeding 60 V for series connection		N/A
	- not exceeding 250 V for parallel connection		N/A
	Maximum rated wattage does not exceed 100 W		N/A
4.7.6 (-)	Tails not provided for luminaires for outdoor use		N/A
4.7.7 (-)	Not more than two cable entries for luminaires for outdoor use		N/A
4.7.8 (-)	Portable luminaires for outdoor use, socket-outlet degree of protection at least same as the luminaire but not less than IPX4.		N/A
	Degree of protection maintained with or without a plug inserted into the socket-outlet.		N/A
	Class II luminaires, mains socket-outlets comply with the standard and only allow connection to Class II luminaires		N/A
	Class I luminaires, mains socket-outlets comply with the standard and only allow connection to Class I or Class II luminaires		N/A
4.7.9 (-)	Lampholders and plugs resistant to tracking for luminaires for outdoor use	See Test Table 4.16 (15.4.2)	N/A
	Compliance to clause 13.4		N/A

4.8 (13)	CREEPAGE DISTANCES AND CLEARANCES		P
4.8 (13.2.1)	Impulse withstand category (Normal category II)	Category II ☒ Category III ☐	—
	Category III according to Annex Q		N/A
	Protected against pollution, reduced creepage and clearance according Annex P of IEC 61347-1:2015		N/A
4.8 (13.2.2)	Creepage distances for frequency up to 30 kHz	See Test Table 4.8 (13) I	P
	Creepage distances for frequency over 30 kHz:		
	- Controlgear marked with $\hat{U}_{OUT}$ and f_{UOUT} according to IEC 61347-1:2015, clause 7.1, item w	See Test Table 4.8 (13) II	N/A
	- Requirements according to IEC 60664-4 for controlgear not covered by IEC 61347	See Test Table 4.8 (13) II	N/A
4.8 (13.2.3)	Clearances for frequency up to 30 kHz	See Test Table 4.8 (13) I	P
	Clearances distances for frequency over 30 kHz:		
	- Controlgear marked with U_P	See Test Table 4.8 (13) II	N/A
	- Requirements according to IEC 60664-4 for controlgear not covered by IEC 61347	See Test Table 4.8 (13) II	N/A



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Clause	Requirement + Test	Result - Remark	Verdict
4.9 (9)	PROVISION FOR EARTHING		P
4.9 (9.2.1 + 9.2.3)	Accessible metal parts		P
	Metal parts in contact with supporting surface		P
	Resistance < 0,5 Ω:	0.022 Ω	P
	Self-tapping screws used		N/A
	Thread-forming screws		N/A
	Thread-forming screw used in a grove		N/A
	Protective earth makes contact first		N/A
	Terminal blocks with integrated screwless protective earthing contacts tested according to Annex R		N/A
	Protective earthing of the luminaire not via built-in controlgear		N/A
4.9 (9.2.2 + 9.2.3)	Protective earth continuity in joints, etc.		N/A
4.9 (9.2.4)	Locking of clamping means		P
	Compliance with 7.7.3		P
4.9 (9.2.5)	Protective earth terminal integral part of connector socket		N/A
4.9 (9.2.6)	Protective earth terminal adjacent to mains terminals		P
4.9 (9.2.7)	Electrolytic corrosion of the protective earth terminal		P
4.9 (9.2.8)	Material of protective earth terminal		P
	Contact surface bare metal		P
4.9 (9.2.10)	Class II luminaire for looping-in or through wiring		N/A
	Double or reinforced insulation to functional earth		N/A
4.9 (9.2.11)	Protective earthing core coloured green-yellow		P
	Length of protective earthing conductor		N/A
4.9 (9.2.12)	PELV circuit connected to protective earth for functional purpose		N/A

4.10 (16)	SCREW TERMINALS		N/A
	Separately approved; component list.....:	(See Annex 1)	N/A
	Part of the luminaire.....:	(See Annex 3)	N/A

4.10 (17)	SCREWLESS TERMINALS AND ELECTRICAL CONNECTIONS		N/A
	Separately approved; component list.....:	(See Annex 1)	N/A
	Part of the luminaire.....:	(See Annex 4)	N/A



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Clause	Requirement + Test	Result - Remark	Verdict
4.11 (8)	EXTERNAL AND INTERNAL WIRING		P
4.11 (8.2)	Supply connection and external wiring		P
4.11 (8.2.1)	Means of connection..... : Detachable supply cord with a plug		P
	Outdoor luminaire without PVC insulated external wiring unless Class III or SELV/PELV circuits ≤ 25 V AC or 60 V DC or 25 V peak interrupted DC voltage with frequency 10Hz -200 Hz or protected from outdoor environment		N/A
4.11 (8.2.2)	Type of cable..... : H05VV-F		P
	Nominal cross-sectional area (mm ²)..... : 3x 0.75mm ²		P
	Cables equal to IEC 60227 or IEC 60245		P
4.11 (8.2.3)	Type of attachment, X, Y or Z	Type X	P
4.11 (8.2.5)	Type Z not connected to screws		N/A
4.11 (8.2.6)	Cable entries:		P
	- suitable for introduction		P
	- adequate degree of protection		P
4.11 (8.2.7)	Cable entries through rigid material have rounded edges		P
4.11 (8.2.8)	Insulating bushings:		P
	- suitably fixed		P
	- material in bushings		P
	- material not likely to deteriorate		P
	- tubes or guards made of insulating material		P
4.11 (8.2.9)	Locking of screwed bushings		N/A
4.11 (8.2.10)	Cord anchorage:		P
	- covering protected from abrasion		P
	- clear how to be effective		P
	- no mechanical or thermal stress		P
	- no tying of cables into knots etc.		P
	- insulating material or lining		N/A
4.11 (8.2.10.2)	Cord anchorage for type X attachment:		N/A
	a) at least one part fixed		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	b) types of cable		N/A
	c) no damaging of the cable		N/A
	d) whole cable can be mounted		N/A
	e) no touching of clamping screws		N/A
	f) metal screw not directly on cable		N/A
	g) replacement without special tool		N/A
	Glands not used as anchorage		N/A
	Labyrinth type anchorages		N/A
4.11 (8.2.10.3)	Adequate cord anchorage for type Y and type Z attachment		N/A
4.11 (8.2.10.4)	Tests:		P
	- impossible to push cable; unsafe		P
	- pull test: 25 times; pull (N).....: 60 N		P
	- torque test: torque (Nm).....: 0.25 Nm		P
	- displacement ≤ 2 mm		P
	- no movement of conductors		P
	- no damage of cable or cord		P
	- function independent of electrical connection		P
4.11 (8.2.10.5)	Luminaire with/designed for use with supply cord with maximum current of 2A:		N/A
	- Ordinary Class III luminaire supplied with SELV ≤ 25 V RMS or 60 V DC		N/A
	- Ordinary Class III luminaire supplied with PELV ≤ 12 V RMS or 30 V DC		N/A
	- Other than ordinary Class III luminaire supplied with voltage ≤ 12 V RMS or 30 V DC		N/A
	Pull test of 30 N		N/A
4.11 (8.2.11)	External wiring passing into luminaire		P
4.11 (8.2.12)	Looping-in terminals		N/A
4.11 (8.2.13)	Wire ends not tinned		P
	Wire ends tinned: no cold flow		N/A
4.11 (8.2.14)	Mains plug same protection		P
	Class III luminaire plug		N/A
	No unsafe compatibility		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
4.11 (8.2.15)	Connectors for Class III luminaires (IEC 60603 or IEC 62680)		N/A
4.11 (8.2.16)	Appliance inlets (IEC 60320)		N/A
	Installation couplers (IEC 61535)		N/A
	Appliance inlet or connector systems (IEC 61984)		N/A
4.11 (8.2.17)	No standardized interconnecting cables properly assembled		N/A
4.11 (8.2.18)	Used plug in accordance with:		P
	- IEC 60083		N/A
	- other standard		P
4.11 (8.3)	Internal wiring		P
4.11 (8.3.1.1)	Internal wiring of suitable size and type	26AWG	P
	Through wiring:		N/A
	- not delivered/ mounting instruction		N/A
	- factory assembled		N/A
	- socket outlet loaded (A).....:		N/A
	- temperatures.....: (see Annex 2)		N/A
	Green- yellow for protective earth only		N/A
4.11 (8.3.1.2)	Internal wiring connected directly to fixed wiring:		P
	Cross-sectional area (mm ²).....:	see Annex 1	P
	Insulation thickness (mm)	see Annex 2	P
	Extra insulation added where necessary		N/A
4.11 (8.3.1.3)	Internal wiring connected to fixed wiring via internal current-limiting device:		N/A
	Cross-sectional area (mm ²).....:		N/A
4.11 (8.3.1.4)	Double or reinforced insulation for class II	For class II part	P
4.11 (8.3.1.5)	Conductors without insulation		N/A
4.11 (8.3.1.6)	SELV/PELV current-carrying parts		N/A
4.11 (8.3.1.7)	Insulation thickness other than PVC or rubber		N/A
4.11 (8.3.2)	Sharp edges etc.		P
	No moving parts of switches etc.		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	Joints, raising/lowering devices		N/A
	Telescopic tubes etc.		N/A
	No twisting over 360°		P
4.11 (8.3.3)	Insulating bushings:		P
	- suitable fixed		P
	- material in bushings		P
	- material not likely to deteriorate		P
	- cables with protective sheath		P
4.11 (8.3.4)	Joints and junctions effectively insulated		N/A
4.11 (8.3.5)	Strain on internal wiring		N/A
4.11 (8.3.6)	Wire carriers		N/A
4.11 (8.3.7)	Wire ends not tinned		N/A
	Wire ends tinned: no cold flow		P
4.11 (8.4)	Test to determine suitability of conductors having a reduced cross-sectional area		N/A
	Under test the temperature of the luminaire wiring insulation does not exceed the limits stated in Table 22	(see Annex 2)	N/A
	No damage to luminaire wiring after test		N/A
4.11.1 (-)	Cord anchorage of luminaire for indoor use made of glass or ceramic not fixed or integral		N/A
4.11.2 (-)	For Class I and Class II luminaires for indoor use, if:		N/A
	- mass < 1 kg (kg).....:		N/A
	- rated current ≤ 2,5 A (A).....:		N/A
	- cable length ≤ 2 m (m).....:		N/A
	- the nominal cross-sectional area of copper conductor ≥ 0,5 mm ² (mm ²).....:		N/A
4.11.3 (-)	Terminals, cord anchorage and inlet opening provided for luminaire for outdoor use delivered without a flexible cable or cord and a plug.		N/A
4.11.4 (-)	Non-detachable flexible cables or cords not lighter than type 245 IEC 57 for Class I and Class II luminaires for outdoor use.		N/A
4.12 (10)	PROTECTION AGAINST ELECTRIC SHOCK		P
4.12 (10.2.1)	Hazardous live parts not accessible		P



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Clause	Requirement + Test	Result - Remark	Verdict
	Basic insulated parts not used on the outer surface without appropriate protection		P
	Basic insulated parts not accessible with standard test finger on portable, settable and adjustable luminaires		P
	Basic insulated parts not accessible with Ø 50 mm probe from outside, other types of luminaires		N/A
	Lamp and starter holders in portable, settable and adjustable luminaires comply with double or reinforced insulation requirements		P
	Basic insulation only accessible under light source/ starter replacement or for accessing serviceable components		P
	Protection in any position		P
	Double-ended tungsten filament lamp or equivalent lamps		N/A
	Insulation lacquer not reliable		N/A
	Double-ended high-pressure discharge lamp		N/A
	Relevant warning according to 6.3.18 fitted to the luminaire		N/A
4.12 (10.2.2)	Portable luminaire adjusted in most unfavourable position		P
4.12 (10.2.3.a)	Class II luminaire:		N/A
	- basic insulated metal parts not accessible		N/A
	- required insulation from hazardous live parts in compliance with Table T.1		N/A
	- glass protective shields not used as supplementary insulation		N/A
4.12 (10.2.3.b)	BC lamp holder of metal in class I luminaires shall be connected to protective earth		N/A
4.12 (10.2.3.c)	SELV circuits with exposed current carrying parts:		N/A
	Ordinary luminaire:		N/A
	- voltage under load/ no-load AC (V).....:		N/A
	- voltage under load/ no-load DC (V).....:		N/A
	- interrupted DC voltage (V)		N/A
	- touch current if applicable (mA)		N/A
	One conductive part insulated if required		N/A
	Other than ordinary luminaire:		
	- voltage under load/ no-load AC (V).....:		N/A
	- voltage under load/ no-load DC (V).....:		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	- interrupted DC voltage (V)		N/A
	Class III luminaire only for connection to SELV/PELV		N/A
4.12 (10.2.3.d)	PELV circuits with exposed current carrying parts:		N/A
	Ordinary luminaire:		N/A
	- voltage under load/ no-load AC (V).....		N/A
	- voltage under load/ no-load DC (V).....		N/A
	Other than ordinary luminaire:		N/A
	- voltage under load/ no-load AC (V).....		N/A
	- voltage under load/ no-load DC (V).....		N/A
	One pole insulated if required		N/A
4.12 (10.2.4)	Portable luminaire has protection independent of mounting surface		P
4.12 (10.2.5)	Compliance with the standard test finger or relevant probe		P
4.12 (10.2.6)	Covers reliably secured		P
4.12 (10.2.7)	Luminaire other than below with capacitor > 0,5 μ F not exceed 50 V, 1 min after disconnection		N/A
	Portable luminaire with capacitor > 0,1 μ F (0.25) not exceed 34 V, 1 s after disconnection		N/A
	Other luminaires with capacitor > 0,1 μ F (0.25) with plug and track adaptors not exceed 60 V, 5 s after disconnection		N/A
4.12 (-)	Class I luminaire with bayonet lampholder:		N/A
	1) cap not accessible with test finger		N/A
	2) metal lampholder is earthed		N/A

4.13 (14)	ENDURANCE TEST AND THERMAL TEST		P
4.13 (-)	If IP > IP 20 relevant test of (14.4), (14.5), (14.6) and (14.7) after (11.2) before (11.3) as specified in 4.14		—
4.13 (14.2)	Selection of lamps and controlgear		—
	Lamp used according to Annex B	(Lamp used see Annex 2)	—
	Controlgear if separate and not supplied	(Controlgear used see Annex 2)	—
4.13 (14.3)	Endurance test		P
4.13 (14.3.2)	a) mounting- position	As in normal use	—
	b) test temperature (°C).....	40°C	—
	c) total duration (h)	240h	—



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Clause	Requirement + Test	Result - Remark	Verdict
	d) supply voltage (V).....:	1.1x 240V=264V	—
	d) if not equipped with control gear, constant voltage/current (V) or (A)	--	—
	d) Class III luminaires powered via information technology communication cable:		P
	- voltage under normal operation (V).....:		—
	- voltage under abnormal operation (V).....:		—
	e) luminaire ceases to operate		—
	f) luminaire with constant light output function		N/A
4.13 (14.3.3)	After endurance test:		P
	- no part unserviceable		P
	- luminaire not unsafe		P
	- no damage to track system		N/A
	- marking legible		P
	- no cracks, deformation etc.		P
4.13 (14.4)	Thermal test (normal operation)	(see Annex 2)	P
4.13 (14.5)	Thermal test (abnormal operation)	(see Annex 2)	N/A
4.13 (14.6)	Thermal test (failed windings in controlgear):		N/A
4.13 (14.6.2)	Through wiring or looping-in wiring loaded by a current of (A)		—
	- case of abnormal conditions.....:		—
	- electronic controlgear		N/A
	- measured winding temperature (°C): at 1,1 Un		—
	- measured mounting surface temperature (°C) at 1,1 Un		N/A
	- calculated mounting surface temperature (°C)		N/A
	- track-mounted luminaires		N/A
4.13 (14.6.3)	Temperature sensing control		N/A
	- case of abnormal conditions.....:		—
	- thermal link		N/A
	- manual reset cut-out		N/A
	- auto reset cut-out		N/A
	- measured mounting surface temperature (°C)		N/A
	- track-mounted luminaires		N/A
4.13 (14.7)	Thermal test in regard to fault conditions in controlgear or electronic devices incorporated in thermoplastic luminaires		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
4.13 (14.7.2)	Luminaire without temperature sensing control		N/A
4.13 (14.7.2.1)	Luminaire with fluorescent lamp $\leq 70W$:		N/A
	Test method 14.7.1.1 or Annex S		—
	Test according to 14.7.1.1:		N/A
	- case of abnormal conditions.....		—
	- Ballast failure at supply voltage (V)		—
	- Components retained in place after the test		N/A
	- Test with standard test finger after the test		N/A
	Test according to Annex S:		
	- case of abnormal conditions.....		—
	- measured winding temperature ($^{\circ}C$): at 1,1 Un.....		—
	- measured temperature of fixing point/exposed part ($^{\circ}C$): at 1,1 Un.....		—
	- calculated temperature of fixing point/exposed part ($^{\circ}C$).....		—
	Ball-pressure test.....	See Test Table 4.16 (15.2.2)	N/A
4.13 (14.7.2.2)	Luminaire with discharge lamp, fluorescent lamp $> 70W$, transformer $> 10 VA$:		N/A
	- case of abnormal conditions.....		—
	- measured winding temperature ($^{\circ}C$): at 1,1 Un.....		—
	- measured temperature of fixing point/exposed part ($^{\circ}C$): at 1,1 Un.....		—
	- calculated temperature of fixing point/exposed part ($^{\circ}C$).....		—
	Ball-pressure test.....	See Test Table 4.16 (15.2.2)	N/A
4.13 (14.7.2.3)	Luminaire with short circuit proof transformers $\leq 10 VA$:		
	- case of abnormal conditions.....		—
	- Components retained in place after the test		N/A
	- Test with standard test finger after the test		N/A
4.13 (14.7.3)	Luminaire with temperature sensing control		N/A
	- thermal link.....	Yes ☐ No ☐	—
	- manual reset cut-out.....	Yes ☐ No ☐	—
	- auto reset cut-out.....	Yes ☐ No ☐	—
	- case of abnormal conditions.....		—



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Clause	Requirement + Test	Result - Remark	Verdict
	- highest measured temperature of fixing point/ exposed part (°C):..... :		—
	Ball-pressure test:..... :	See Test Table 4.16 (15.2.2)	N/A
4.13 (-)	Luminaire for indoor use tested in overturned position (overturns < 15°)		N/A

4.14 (11)	RESISTANCE TO DUST, SOLID OBJECTS AND MOISTURE		P
4.14 (-)	If IP > IP 20 the order of tests as specified in clause 4.13		P
4.14 (11.2.1)	Tests for ingress of dust, solid objects and moisture:		P
	- classification according to IP..... :	IP20	—
	- mounting position during test..... :	As in normal use	—
	- fixing screws tightened; torque (Nm)..... :	--	—
	- tests according to clauses..... :		—
	- electric strength test afterwards		P
	a) no deposit in dust-proof luminaire		N/A
	b) no talcum in dust-tight luminaire		N/A
	c) no trace of water on current-carrying parts or on insulation where it could become a hazard		P
	c.1) For luminaires without drain holes – no water entry		N/A
	c.2) For luminaires with drain holes – no hazardous water entry		N/A
	d) no water in watertight, pressure watertight, high pressure and temperature water jet-proof or high pressure and cold-water jet-proof luminaire		N/A
	e) no contact with live parts (IP 2X)		P
	e) no entry into enclosure (IP 3X and IP 4X)		N/A
	e) no contact with live parts through drain holes and ventilation slots (IP3X and IP4X)		N/A
	f) no trace of water on part of lamp requiring protection from splashing water		N/A
	g) no damage of protective shield or glass envelope		P
4.14 (11.3)	Humidity test 48 h	25 °C, 93%R.H	P

4.15 (12)	INSULATION RESISTANCE AND ELECTRIC STRENGTH, TOUCH CURRENT AND PROTECTIVE CONDUCTOR CURRENT		P
4.15 (12.2.2)	Insulation resistance test		P
	Cable or cord covered by metal foil or replaced by a metal rod of mm Ø :		—



IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
	Insulation resistance (MΩ):		N/A
	SELV/PELV:		P
	- between current-carrying parts of different polarity..... :		N/A
	- between current-carrying parts and mounting surface..... :		N/A
	- between current-carrying parts and metal parts of the luminaire..... :		N/A
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts..... :		N/A
	- Insulation bushings as described in Clause 8		N/A
	Other than SELV/PELV:		P
	- between hazardous live parts of different polarity..... :	>100MΩ	P
	- between hazardous live parts and mounting surface. :	>100MΩ	P
	- between hazardous live parts and metal parts..... :	>100MΩ	P
	- between hazardous live parts of different polarity through action of a switch..... :		N/A
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts..... :		N/A
	- Insulation bushings as described in Clause 8		N/A
4.15 (12.2.3)	Electric strength test		P
	Dummy lamp		N/A
	Luminaires with ignitors after 24 h test		N/A
	Luminaires with manual ignitors		N/A
	Test voltage (V):		N/A
	SELV/PELV:		N/A
	- between current-carrying parts of different polarity..... :		N/A
	- between current-carrying parts and mounting surface..... :		N/A
	- between current-carrying parts and metal parts of the luminaire..... :		N/A
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts..... :		N/A
	- Insulation bushings as described in Clause 8		N/A
	Other than SELV/PELV:		N/A
	- between hazardous live parts of different polarity..... :	1480 V	P
	- between hazardous live parts and mounting surface. :	2960 V	P



IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
	- between hazardous live parts and metal parts..... :	2960 V	P
	- between hazardous live parts of different polarity through action of a switch..... :		N/A
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts..... :		N/A
	- Insulation bushings as described in Clause 8		N/A
4.15 (12.3)	Touch current, protective conductor current and electric burn		P
4.15 (12.3)	Touch current (mA)..... :	0.07	P
	Protective conductor current (mA)..... :	0.21	P

4.16 (15)	RESISTANCE TO HEAT, FIRE AND TRACKING		P
4.16 (15.2.2)	Ball-pressure test..... :	See Test Table 4.16 (15.2.2)	P
4.16 (15.3.2)	Needle-flame test (10 s)..... :	See Test Table 4.16 (15.3.2)	P
4.16 (15.3.3)	Glow- wire test (650°C)..... :	See Test Table 4.16 (15.3.3)	P
4.16 (15.4.2)	Proof tracking test (IEC 60112)..... :	See Test Table 4.16 (15.4.2)	N/A



4.8 (13)	TABLE I: Creepage distances and clearances							P
	Minimum distances (mm) for AC up to 30 kHz sinusoidal voltages							P
	Applicable part of IEC 60598-1 Table 18*, 19* and 20*							P
	Insulation type **	Measured clearance	Required		Measured creepage	Required		
			clearance	*Table		creepage	*Table	
Distance 1:	B	3.1	1.5	11.1	3.1	2.5	11.1	
Working voltage (V)..... :					240V			—
PTI..... :					<div>< 600 ☒ ≥ 600 ☐</div>			—
Pulse voltage or U_P if applicable (kV)								—
Supplementary information:								
Distance 2:	R	8.2	3	11.1	8.2	5	11.1	
Working voltage (V)..... :					240V			—
PTI..... :					<div>< 600 ☒ ≥ 600 ☐</div>			—
Pulse voltage or U_P if applicable (kV)								—
Supplementary information:								
Distance 3:	B	3.3	1.5	11.1	3.3	2.5	11.1	
Working voltage (V)..... :					240V			—
PTI..... :					<div>< 600 ☒ ≥ 600 ☐</div>			—
Pulse voltage or U_P if applicable (kV)								—
Supplementary information:								



4.8 (13)	TABLE II: Creepage distances and clearances							N/A
Minimum distances (mm) for AC higher than 30 kHz sinusoidal voltages								
Applicable part of IEC 61347-1 Table 7 and 8* or IEC 60664-4 Table 1 and 2								
Distances	Insulation type **	Measured clearance	Required		Measured creepage	Required		
			clearance	*Table		creepage	*Table	
Distance 1:								
Working voltage (V)..... :							—	
Frequency if applicable (kHz)..... :							—	
PTI..... :					< 600 ☐ ≥ 600 ☐		—	
Peak value of the working voltage $\hat{U}_{out}$ if applicable (kV) :							—	
Supplementary information:								
Distance 2:								
Working voltage (V)..... :							—	
Frequency if applicable (kHz)..... :							—	
PTI..... :					< 600 ☐ ≥ 600 ☐		—	
Peak value of the working voltage $\hat{U}_{out}$ if applicable (kV) :							—	
Supplementary information:								
Distance 3:								
Working voltage (V)..... :							—	
Frequency if applicable (kHz)..... :							—	
PTI..... :					< 600 ☐ ≥ 600 ☐		—	
Peak value of the working voltage $\hat{U}_{out}$ if applicable (kV) :							—	
Supplementary information:								



4.16 (15.2.2)	TABLE: Ball Pressure Test of Thermoplastics			P
Allowed impression diameter (mm):		2		—
Object/ Part No./ Material	Manufacturer/ trademark	Test temperature (°C)	Impression diameter (mm)	
Plastics Enclosure	See annex1	125	1.0	
Supplementary information:				

4.16 (15.3.2)	TABLE: Needle-flame test				P
Object/ Part No./ Material	Manufacturer/ trademark	Duration of application of test flame (ta); (s)	Ignition of specified layer Yes/No	Duration of burning (tb) (s)	Verdict
Plastics Enclosure	See annex1	10	NO	0	Pass
Supplementary information:					

4.16 (15.3.3)	TABLE: Resistance to heat and fire - Glow wire tests					P
Object/ Part No./ Material	Manufacturer/ trademark	GWT (°C): 650			Ignition of specified layer	Verdict
		t_E (s)	t_I (s)	t_R (s)	Yes/No	
Plastics Enclosure	See annex1	--	0	--	No	Pass
LED cover	See annex1	--	0	--	No	Pass
Supplementary information:						

4.16 (15.4.2)	TABLE: Proof tracking test				N/A
Test voltage PTI		175 V			—
Object/ Part No./ Material	Manufacturer/ trademark	Withstand 50 drops without failure on three places or on three specimens			Verdict
--	--	--	--	--	--
Supplementary information:					



ANNEX 1		TABLE: Critical components information					P
Object / part No.	Code	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾	
Plug	B	Sheng Yi Electric Factory	SY-22	16A 250V~	IEC 60884-1	VDE 40007744	
Power cord	B	Shenzhen Baohing Electric Wire& Cable Manufacture Co.,Ltd.	H05VV-F	3*0.75mm ²	DIN EN 50525-2-11	VDE 103727	
Plastic enclosure	B	LG CHEM (GUANGZHOU) ENGINEERING PLASTICS CO LTD	LUPOY EF-1006F(m)	V-0, 120°C, min. 1.7 mm thickness	UL 94, UL 746	UL E248280	
LED Driver	B	ChangZhou Chuangllan Power Supply Technology Corporation	HS-60W--W--DP	INPUT: 100-240V~, 50/60Hz OUTPUT: DC 46-85V, 0.65A, 60W, PF>0.9	IEC 62368-1	IEC	
Switch	B	LECI Electronics Co., Ltd	RS601D Serie(s)	AC 250V, 6(4)A, 1E4, T85	IEC/ EN 61058-1 IEC/ EN 61058-1-1	VDE 40017430	
AC inlet	B	Yueqing Yanhui Electronic Co., Ltd.	DB-14	AC 250 V, 10 A	IEC/ EN 60320-1	VDE 40032008	
LED cover	B	Ningbo Zhetie Dafeng Chemical Co., Ltd	PC02-10UR	PC	EN 60598-1 EN 60598-2-4	Tested with appliance#	
Internal wire	B	Shenzhen Runqi Wire Co Ltd	1007	VW-1, 24AWG, 300V, 80°C	UL 758	UL E495994	
LED module PCB	B	GOLDENMAX INTERNATIONAL TECHNOLOGY (HanZhou)LTD	GT0020	130°C, V-0	UL 796	UL E134893	
PCB	B	GOLDENMAX INTERNATIONAL TECHNOLOGY (HanZhou)LTD	GT0020	130°C, V-0	UL 796	UL E134893	
LED	B	Xiamen Dacol Photoelectronics Technology Co.,Ltd	DC-P2835-3Wxx-x-x	2835 8.8-11.2V/100mA, 2700-6000K	IEC TR 62778	Tested with appliance#	



Supplementary information:

¹⁾ Provided evidence ensures the agreed level of compliance. See OD-CB2039.

The codes above have the following meaning:

- A - The component is replaceable with another one, also certified, with equivalent characteristics
- B - The component is replaceable if authorised by the test house
- C - Integrated component tested together with the appliance
- D - Alternative component



ANNEX 2	TABLE: Thermal tests of Section 14						
	Type reference..... :	LED THERAPY LIGHT	—				
	Light source used..... :	LED	—				
	Controlgear used..... :	HS-60W--W--DP	—				
	Battery/EDLC used..... :	--	—				
	Mounting position of luminaire..... :	As in normal use	—				
	Supply wattage (W)	378.3	—				
	Supply current (A)	2.71	—				
	Temperatures in test 1 - 4 below are corrected for ta (°C)	25	—				
	- abnormal operating mode..... :	--	—				
4.13 (14.4)	- test 1: rated voltage	240V	—				
	- test 2: 1,06 times rated voltage, or 1,05 times rated wattage or 1,1 times constant voltage/current	1.06 x 240V=254.4V	—				
	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage..... :	--	—				
	Through wiring or looping-in wiring loaded by a current of A during the test	--	—				
4.13 (14.5)	- test 4: 1,1 times rated voltage, or 1,05 times rated wattage or 1,1 times constant voltage/current or 130/150% of rated input voltage..... :	--	—				
Temperature measurements (°C)							
Part	Ambient	Sub-cl. 14.4 – normal				Sub-cl. 14.5 – abnormal	
		test 1	test 2	test 3	limit	test 4	limit
Power cord	25	--	33.2	--	90	--	--
Tc for LED Driver		70.5	--	--	90	--	--
Internal wire		--	37.7	--	80	--	--
LED module PCB		--	60.4	--	130	--	--
PCB		--	52.2	--	130	--	--
Switch body		--	40.5	--	85	--	--
Plastics lens LED cover		--	38.9	--	Ref.	--	--
Metal enclosure(Adjust the position of the touch and the range of 5cm around it)		--	41.4	--	Ref.	--	--
Mounting surface		--	29.8	--	90	--	--
Supplementary information:							



ANNEX 3	Screw terminals (part of the luminaire)		N/A
(16)	SCREW TERMINALS		N/A
(16.2)	Type of terminal..... :		—
	Rated current (A)..... :		—
(16.2.2.2)	One or more conductors		N/A
(16.2.2.3)	Special preparation		N/A
(16.2.2.4)	Terminal size		N/A
	Cross-sectional area (mm ²)..... :		—
(16.2.3)	Conductor space (mm)..... :		N/A
(16.3)	Mechanical requirements and tests		N/A
(16.3.1)	Minimum distance		N/A
(16.3.2)	Cannot slip out		N/A
(16.3.3)	Special preparation		N/A
(16.3.4)	Nominal diameter of thread (metric ISO thread)..... :	M	N/A
	External wiring		N/A
	No soft metal		N/A
(16.3.5)	Corrosion		N/A
(16.3.6)	Nominal diameter of thread (mm)..... :		N/A
	Torque (Nm)..... :		N/A
(16.3.7)	Between metal surfaces		N/A
	Lug terminal		N/A
	Mantle terminal		N/A
	Pull test; pull (N)..... :		N/A
(16.3.8)	Without undue damage		N/A



ANNEX 4	Screwless terminals (part of the luminaire)		N/A
(17)	SCREWLESS TERMINALS		N/A
(17.2)	Type of terminal.....:		—
	Rated current (A).....:		—
(17.2.1)	Material		N/A
(17.2.2)	Clamping		N/A
(17.2.3)	Stop		N/A
(17.2.4)	Unprepared conductors		N/A
(17.2.5)	Pressure on insulating material		N/A
(17.2.6)	Clear connection method		N/A
(17.2.7)	Clamping independently		N/A
(17.2.8)	Fixed in position		N/A
(17.2.10)	Conductor size		N/A
	Type of conductor		N/A
(17.4)	Terminals and connections for internal wiring		
(17.4.1)	Mechanical tests		N/A
(17.4.1.2.1)	Pull test spring-type terminals (4 N, 4 samples).....:		N/A
(17.4.1.2.3)	Pull test pin or tab terminals (4 N, 4 samples).....:		N/A
	Insertion force not exceeding 50 N		N/A
(17.4.1.3)	Permanent connections: pull-off test (20 N)		N/A
(17.4.2)	Electrical tests		
	Voltage drop (mV) after 1 h (4 samples).....:		N/A
	Voltage drop of two inseparable joints		N/A
	Number of cycles:		—
	Voltage drop (mV) after 10th alt. 25th cycle (4 samples).....:		N/A
	Voltage drop (mV) after 50th alt. 100th cycle (4 samples).....:		N/A
	After ageing, voltage drop (mV) after 10th alt. 25th cycle (4 samples).....:		N/A
	After ageing, voltage drop (mV) after 50th alt. 100th cycle (4 samples).....:		N/A
(17.5)	Terminals and connections for external wiring		N/A
(17.5.1)	Conductors		N/A
	Terminal size and rating		N/A
17.5.2	Mechanical tests		N/A
(17.5.2.2)	Pull test spring-type terminals or welded connections (4 samples); pull (N)		N/A



(17.5.2.3)	Pull test pin or tab terminals (4 samples); pull (N)		N/A
(17.5.3)	Electrical tests		N/A
	Tests according 17.5.3.2 + 17.5.3.3 in IEC 60598-1		N/A

(17.5.3.2) (17.5.3.3)	TABLE: Contact resistance test / Heating tests										N/A
	Voltage drop (mV) after 1 h										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)											
	Voltage drop of two inseparable joints										
	Voltage drop after 10th alt. 25th cycle										
	Max. allowed voltage drop (mV)..... :										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)											
	Voltage drop after 50th alt. 100th cycle										
	Max. allowed voltage drop (mV)..... :										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)											
	Continued ageing: voltage drop after 10th alt. 25th cycle										
	Max. allowed voltage drop (mV)..... :										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)											
	Continued ageing: voltage drop after 50th alt. 100th cycle										
	Max. allowed voltage drop (mV)..... :										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)											
Supplementary information:											

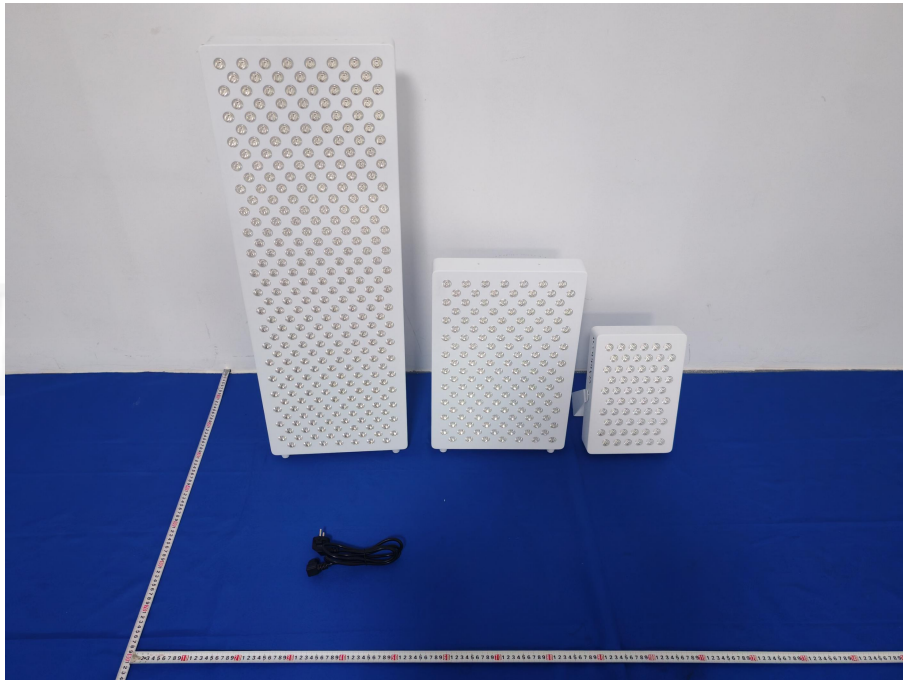


ATTACHMENT I to IEC 60598-2-4:2017			
IEC 60598-2-4:2017			
EUROPEAN GROUP DIFFERENCES AND EUROPEAN NATIONAL DIFFERENCES			
Luminaires			
Part 2-4: Particular requirements – Portable general purpose luminaires			
Differences according to.....: EN 60598-2-4:2018			
TRF template used.....: IECEE OD-2020-F2:2025, Ed. 2.1			
Attachment Form No.....: EU_GD_IEC60598-2-4_2017B			
Attachment Originator.....: UL Solutions (Demko)			
Master Attachment.....: Dated 2025-10-30			
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Clause	Requirement + Test	Result - Remark	Verdict
	CENELEC COMMON MODIFICATIONS		
4.11	EXTERNAL AND INTERNAL WIRING		N/A
4.11.4	For class I and class II portable luminaires for outdoor use, non-detachable flexible cables or cords not lighter than type H05RN-F		N/A
	ANNEX ZB, SPECIAL NATIONAL CONDITIONS		N/A
4.4.4	DK: luminaires for outdoor use classified as class II or class III		N/A

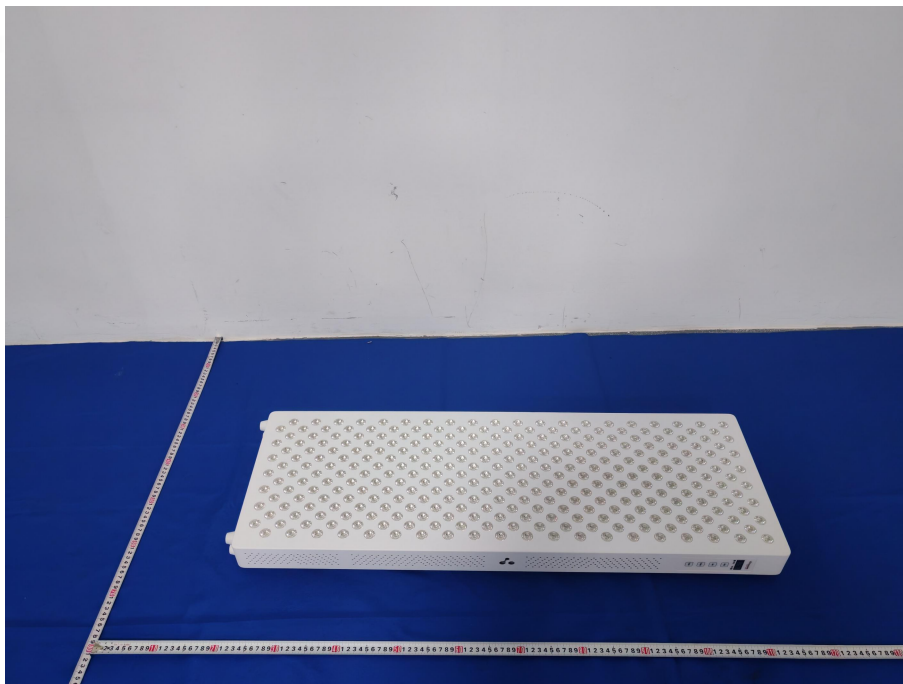


Attachment II: Photo-documentation

EUT Photo 1



EUT Photo 2

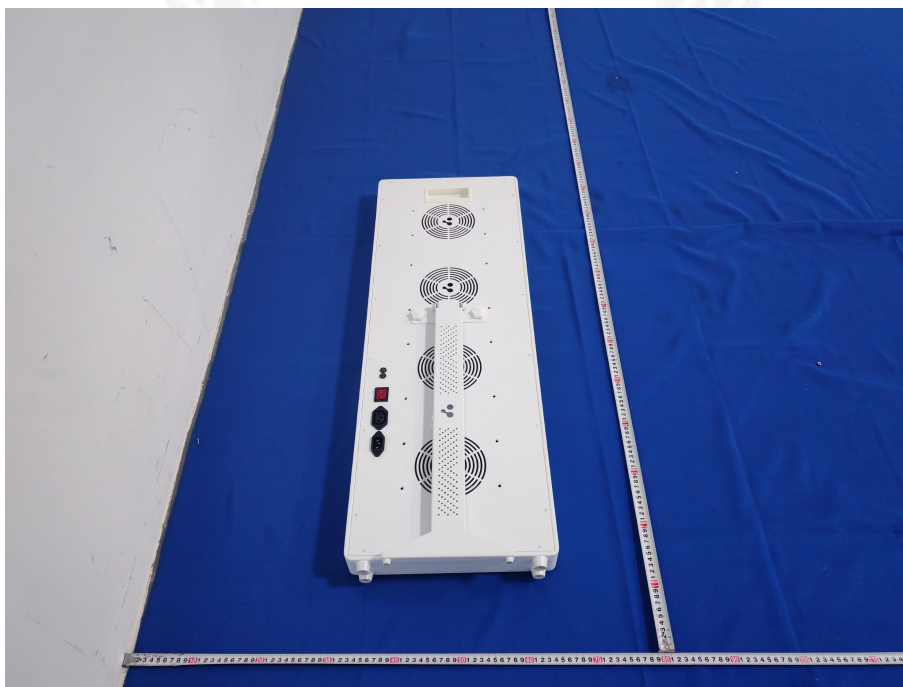




EUT Photo 3



EUT Photo 4

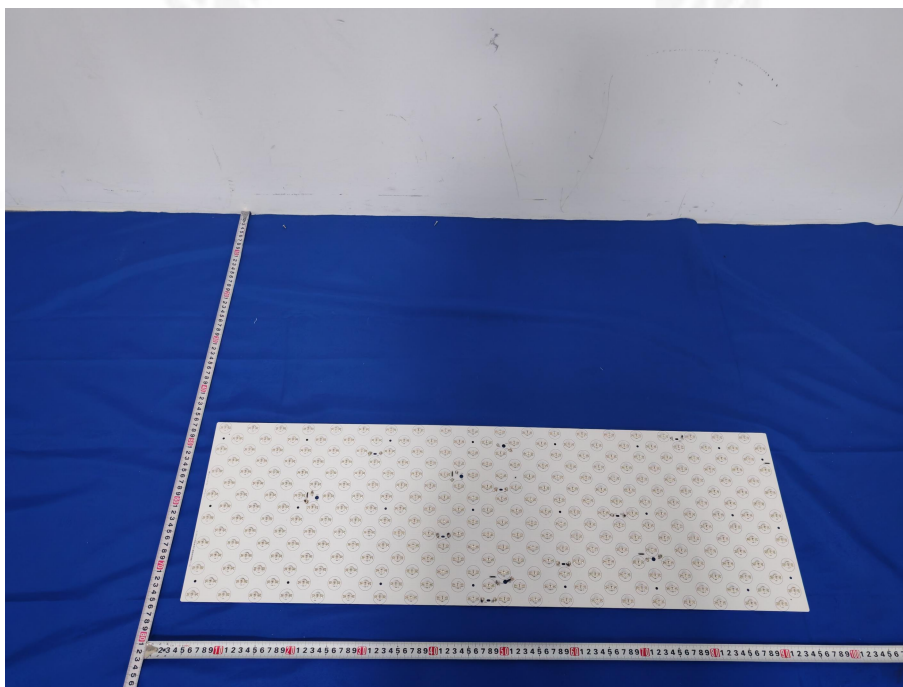




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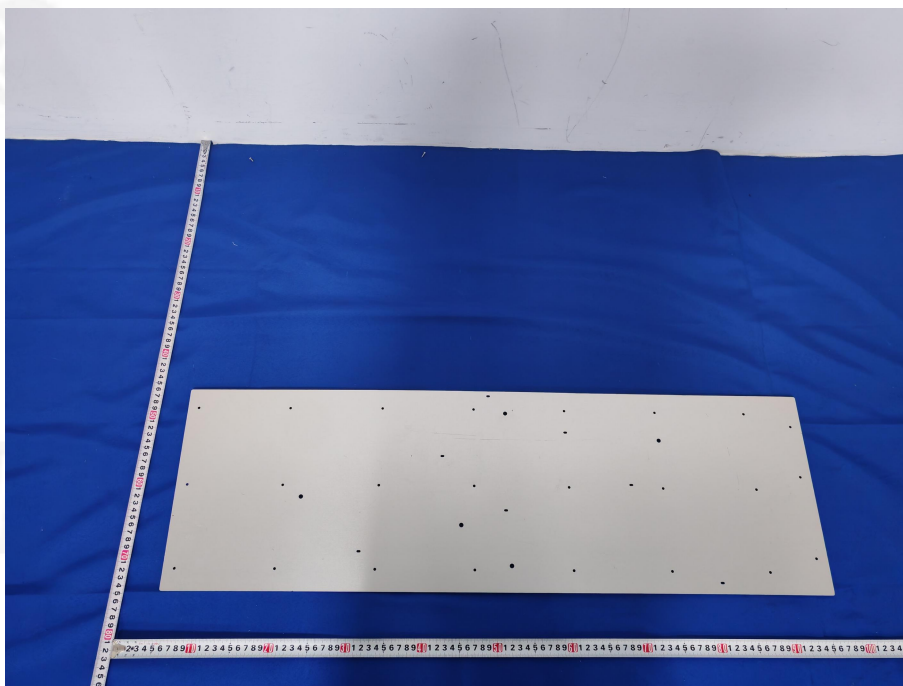


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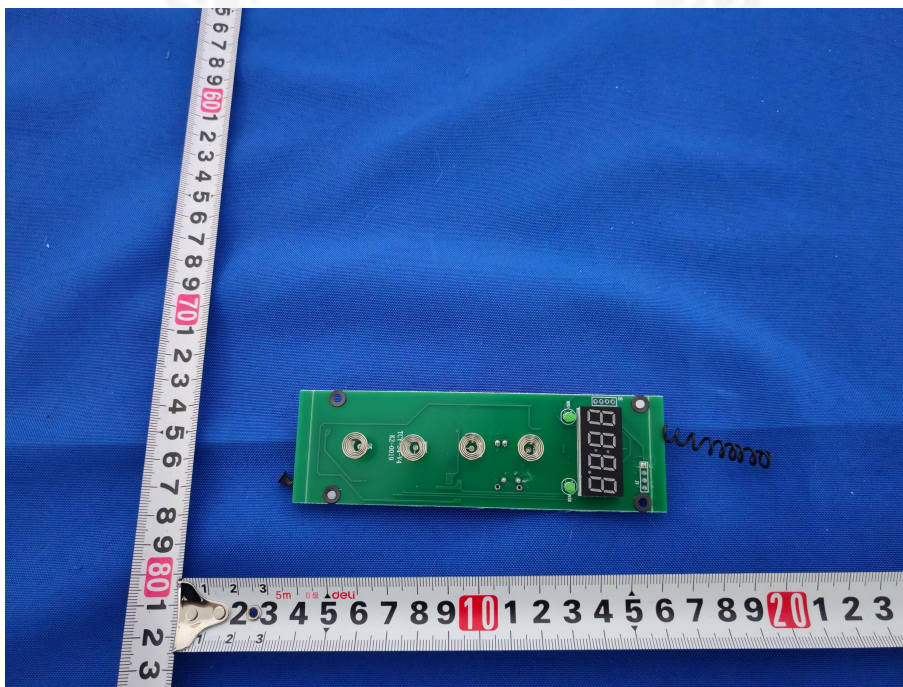




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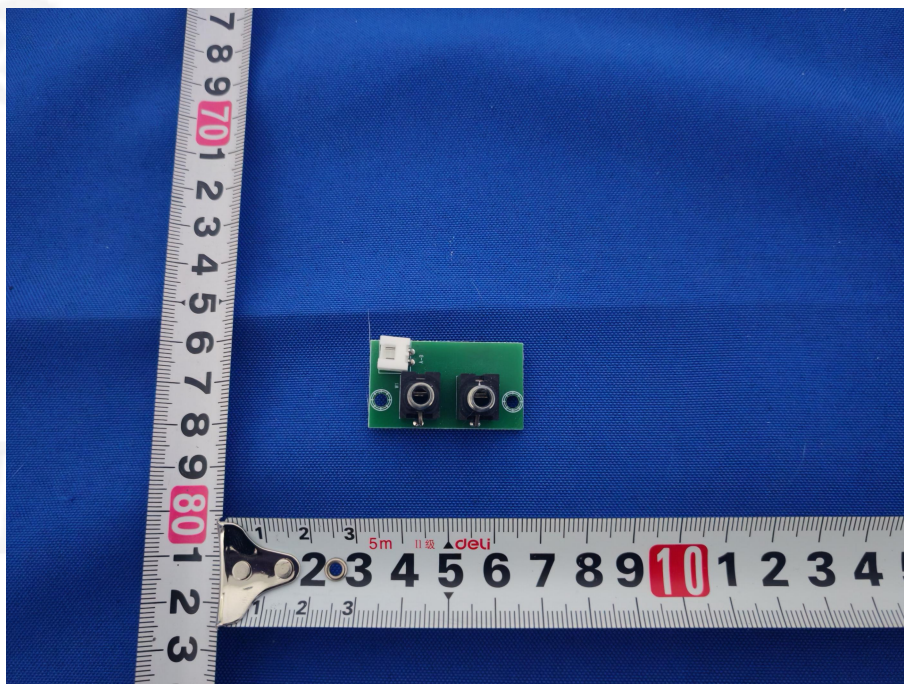


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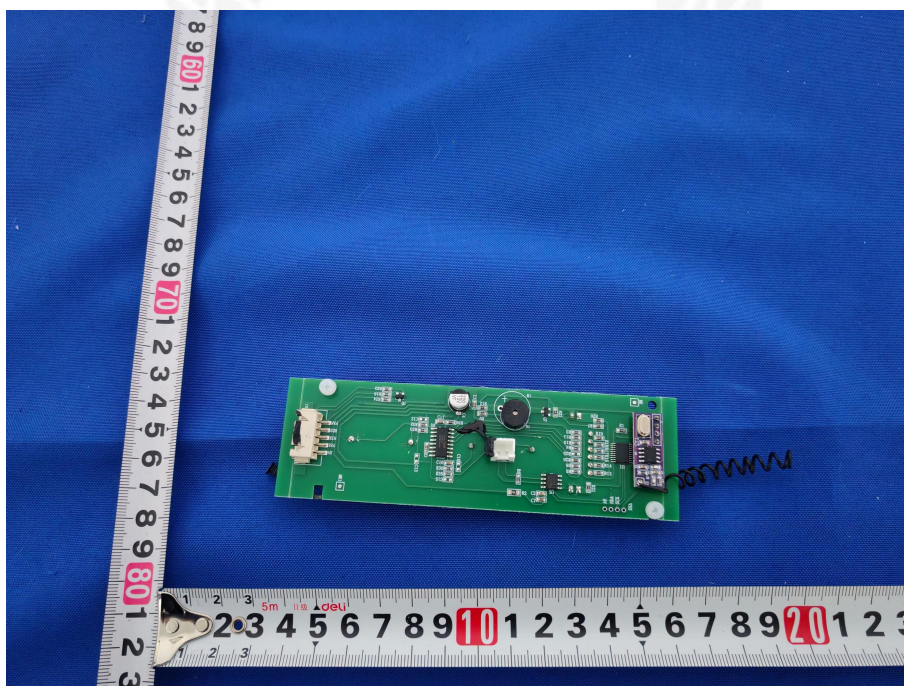




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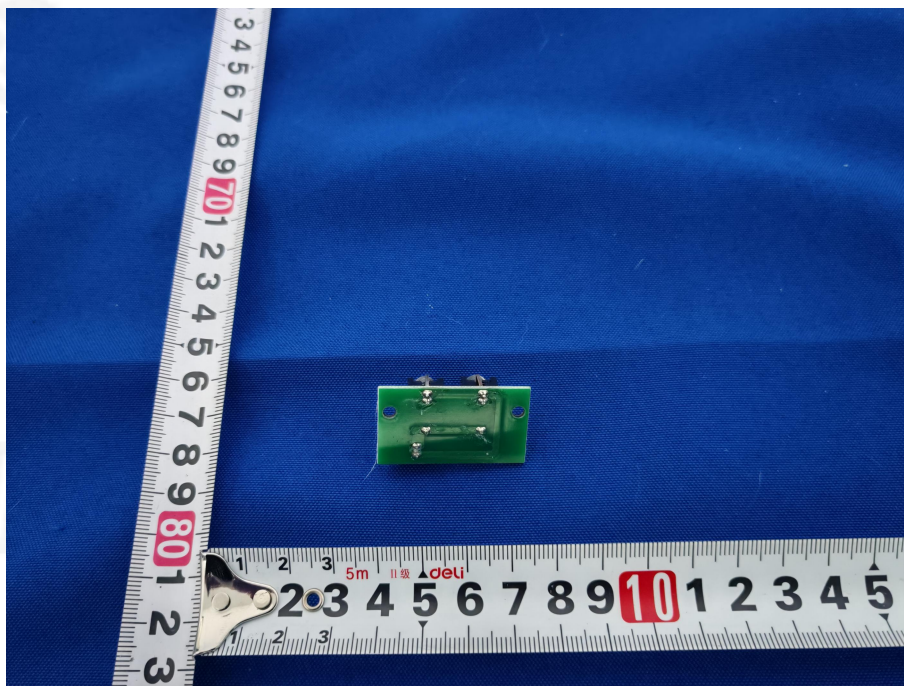


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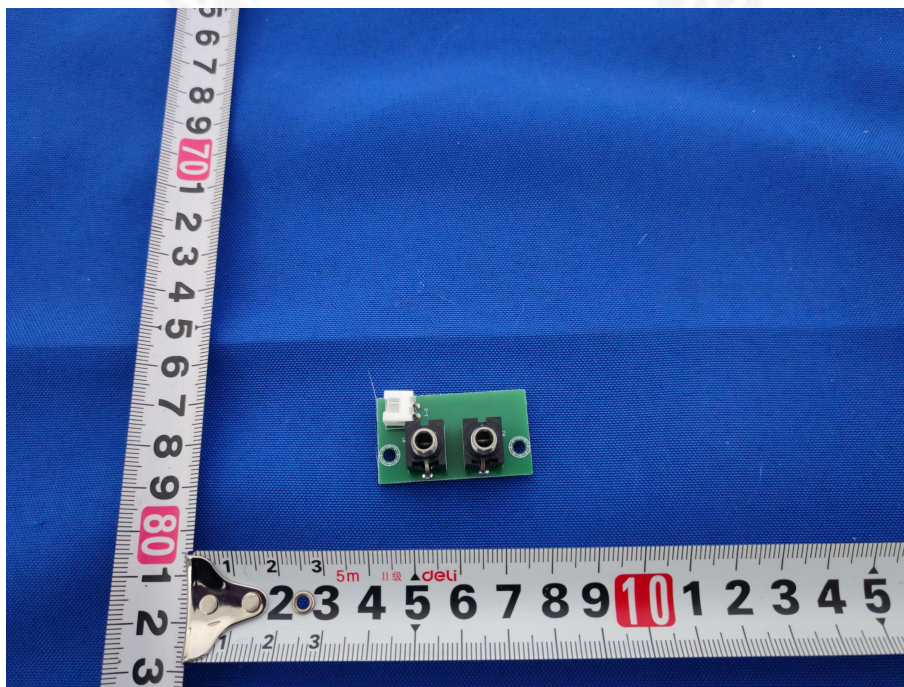




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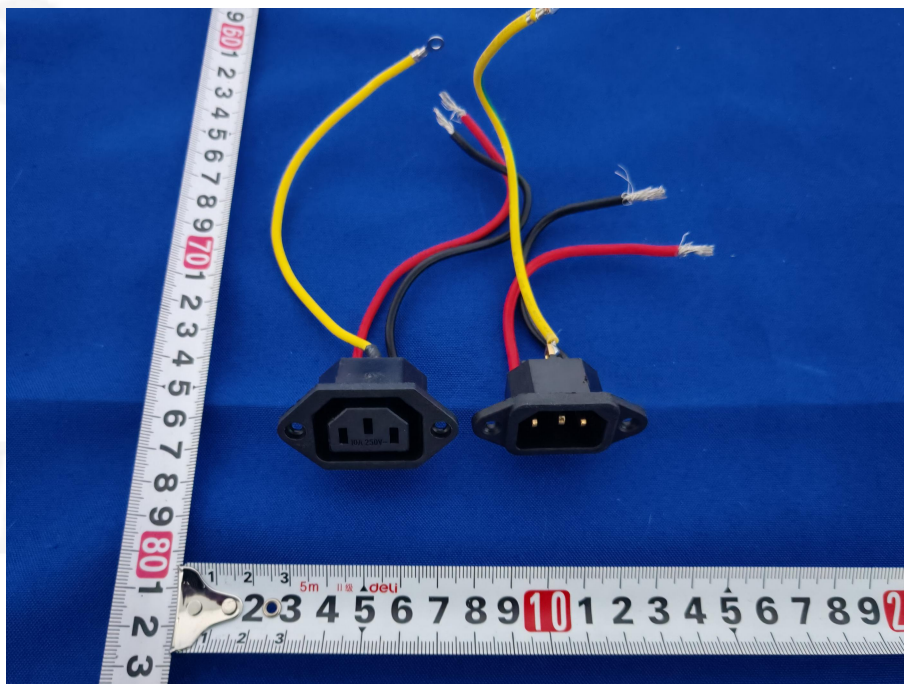


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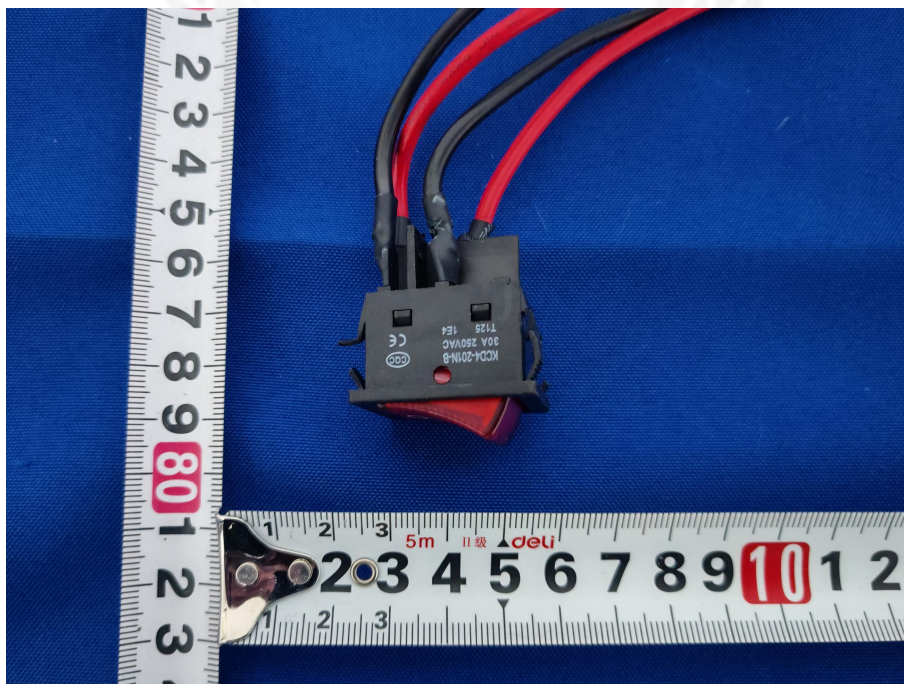




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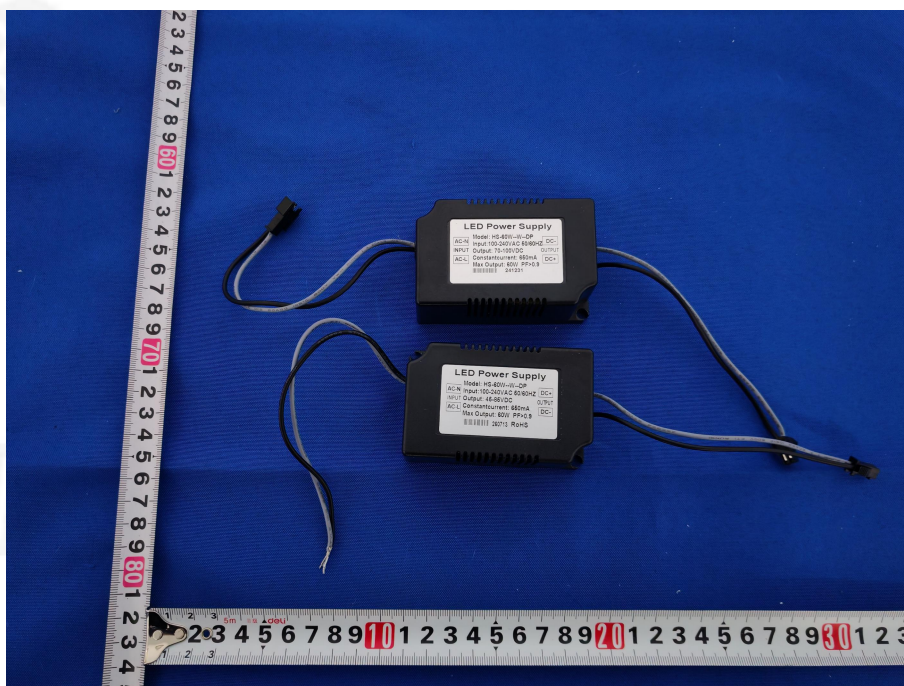


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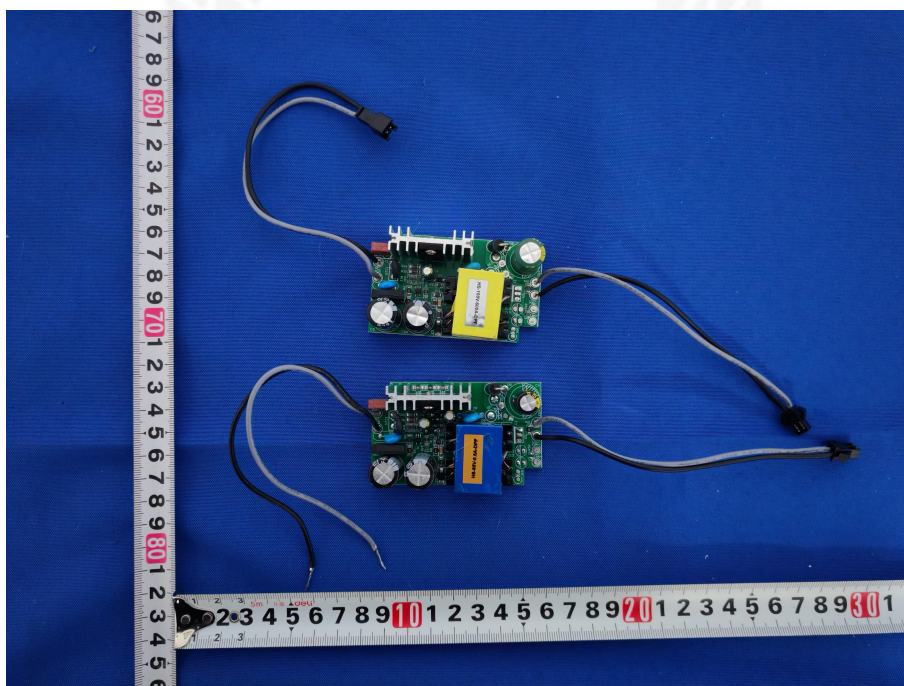




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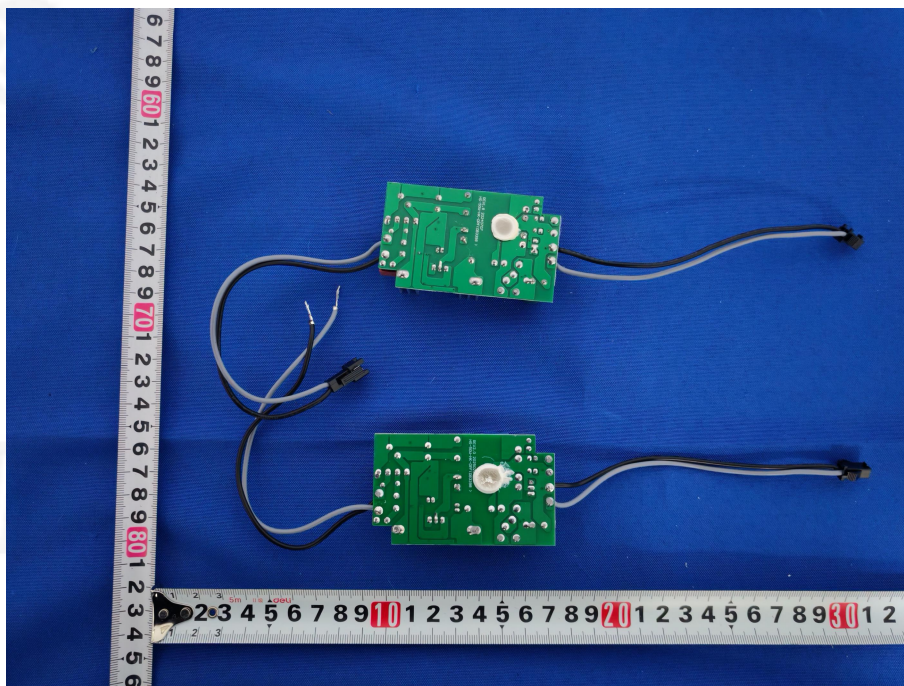


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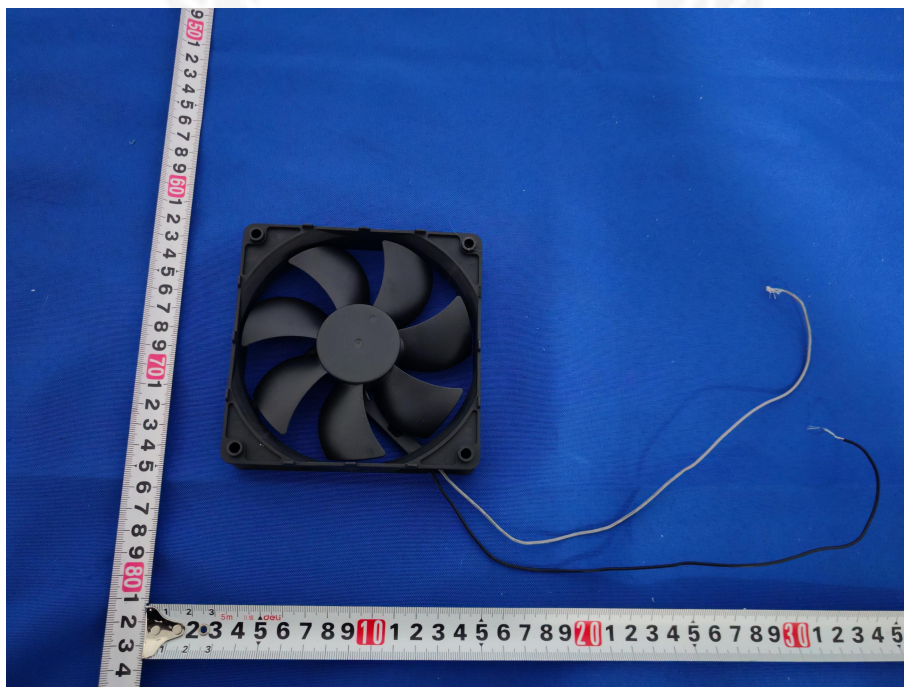




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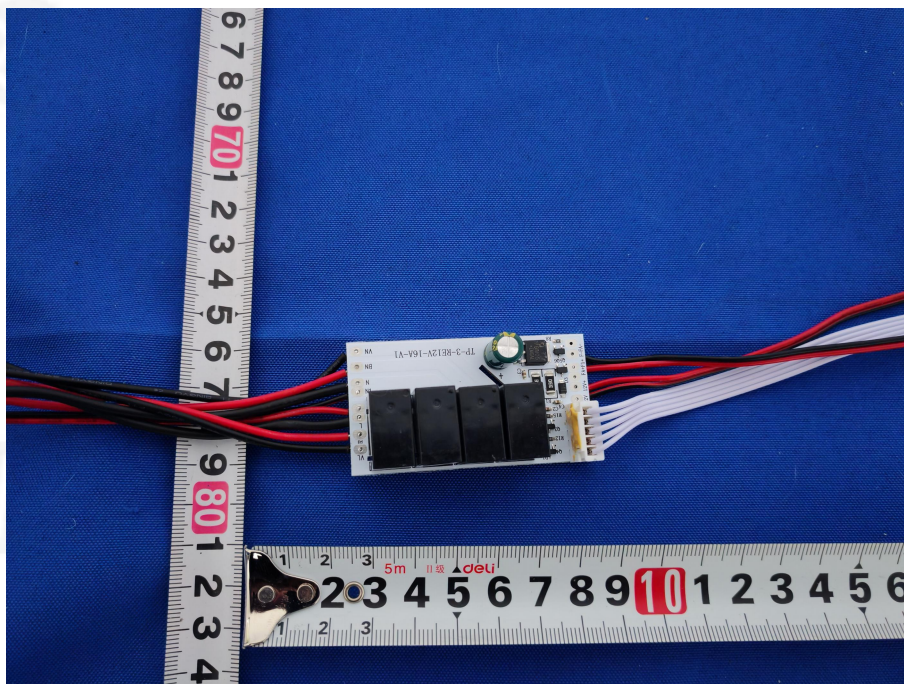


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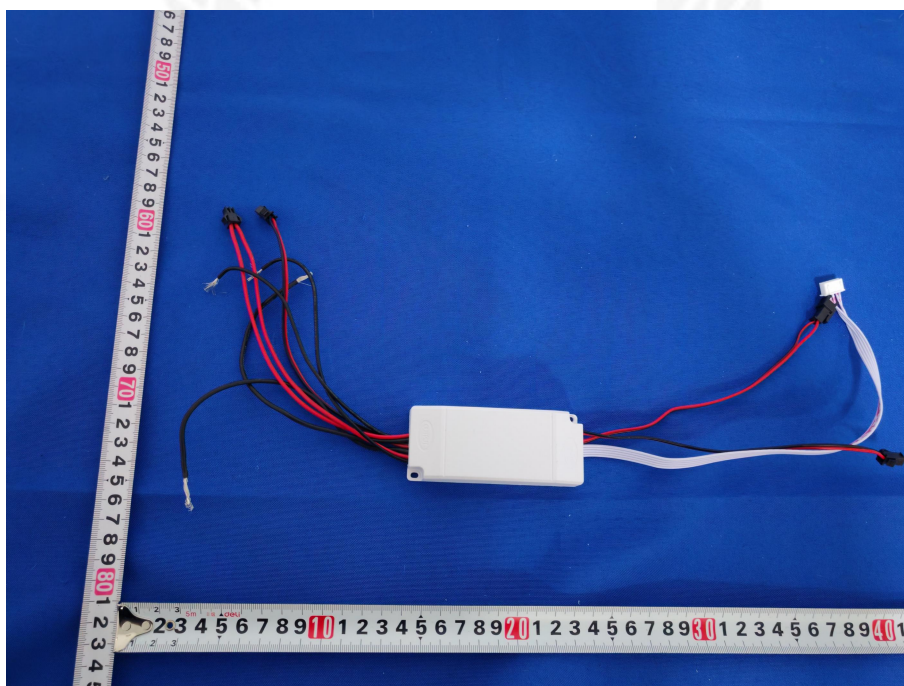




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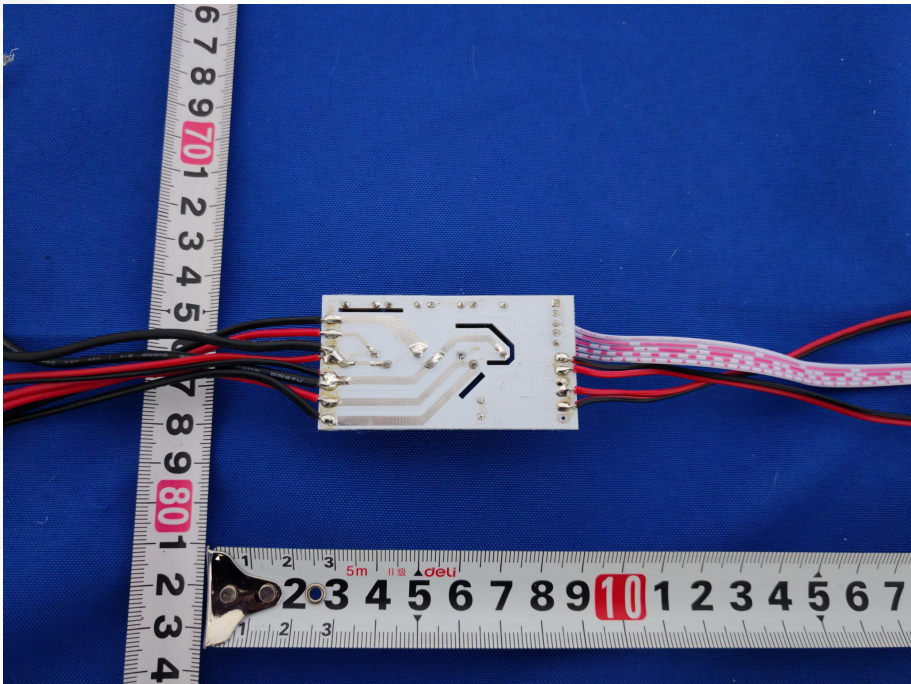


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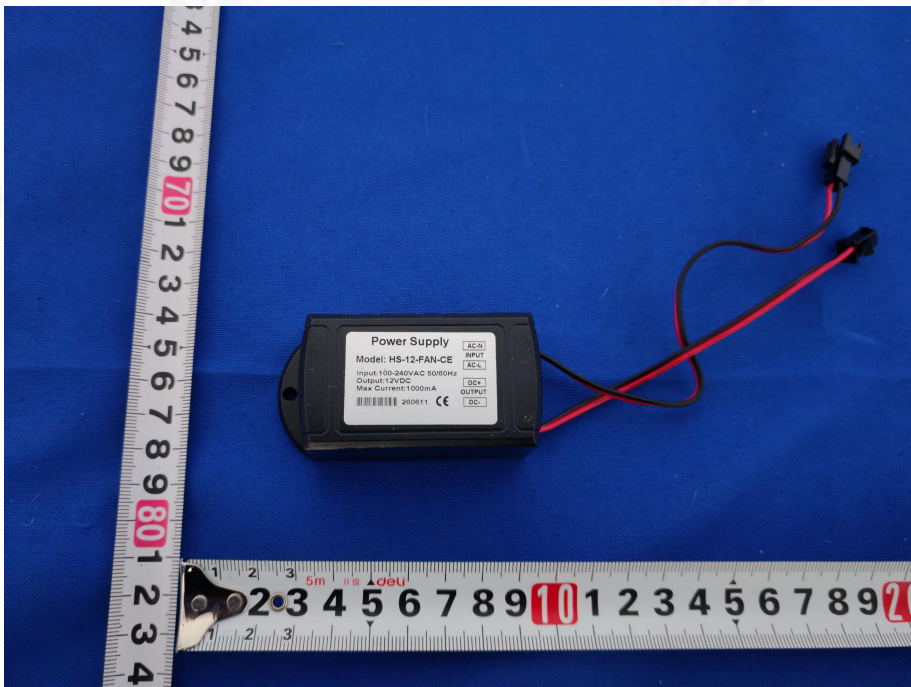




EUT Photo 21



EUT Photo 22



***** END OF REPORT *****