Test Report issued under the responsibility of: L C I E

TEST REPORT
IEC 60598-2-4
Luminaires
Luminaires, Part 2: Particular requirements
Section 4: Portable general purpose luminaires

Report Number. ..... :	**AAOG-ESH-P22011250**
Date of issue ..... :	2022-02-17
Total number of pages ..... :	42 pages(not including attachments)
Name of Testing Laboratory preparing the Report ..... :	LCIE CHINA COMPANY LIMITED Building 4, No. 518, Xin Zhuan Road, CaoHejing Songjiang High-Tech Park, Shanghai P.R.C (201612)
Applicant's name ..... :	Qingdao Yeelink Information Technology Co., Ltd.
Address ..... :	10F-B4, Building B, Qingdao International Innovation Park, No.1 Keyuan Weiyi Road, Laoshan District, Qingdao City, Shandong Province, P.R.China.
Test specification:	
Standard ..... :	IEC 60598-2-4:2017 for use in conjunction with IEC 60598-1:2020
Test procedure ..... :	Test report
Non-standard test method ..... :	N/A
TRF template used ..... :	IECEE OD-2020-F1:2020, Ed.1.3
Test Report Form No. ..... :	IEC60598_2_4I
Test Report Form(s) Originator .... :	UL (US)
Master TRF ..... :	Dated 2021-06-10

Copyright © 2021 IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (IECEE System). All rights reserved.

This publication may be reproduced in whole or in part for non-commercial purposes as long as the IECEE is acknowledged as copyright owner and source of the material. IECEE takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context.

This report is not valid as a CB Test Report unless signed by an approved IECEE Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.

General disclaimer:

The test results presented in this report relate only to the object tested.
This report shall not be reproduced, except in full, without the written approval of the Issuing NCB. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.

Disclaimer: This document is controlled and has been released electronically.
Only the version on the IECEE Website is the current document version

Test item description ..... :	Portable general purpose luminaires (Yeelight Staria Bedside Lamp Pro)
Trade Mark(s) ..... :	YEELIGHT
Manufacturer ..... :	The same as applicant
Model/Type reference ..... :	YLCT03YL
Ratings ..... :	12V ⎓, 5W(Lamp) +13W(Wireless charging module), Class III, ta: 35°C, IP20, Non-user replaceable light source, With certificated Class II LED driver (The Class III luminaire and Class II LED driver are together as the Class II equipment.)

Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):

☒	**CB Testing Laboratory:**	LCIE CHINA COMPANY LIMITED	
Testing location/ address.....:		Building 4, No. 518, Xin Zhuan Road, CaoHejing Songjiang High-Tech Park, Shanghai P.R.C (201612)	
Tested by (name, function, signature).....:		Project engineer Curie WU/Qi ZHOU	Curie Wu Qi Zhou
Approved by (name, function, signature)...:		Product line manager Denis SUN	Denis Sun
☐	**Testing procedure: CTF Stage 1:**	N/A	
Testing location/ address.....:			
Tested by (name, function, signature).....:			
Approved by (name, function, signature)...:			
☐	**Testing procedure: CTF Stage 2:**	N/A	
Testing location/ address.....:			
Tested by (name + signature) .....:			
Witnessed by (name, function, signature) .:			
Approved by (name, function, signature)...:			
☐	**Testing procedure: CTF Stage 3:**	N/A	
☐	**Testing procedure: CTF Stage 4:**	N/A	
Testing location/ address.....:			
Tested by (name, function, signature).....:			
Witnessed by (name, function, signature) .:			
Approved by (name, function, signature)...:			
Supervised by (name, function, signature) :			

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

Attachment 1: Attachment To Test Report European Group Differences And National Differences. (total 2 pages);
Attachment 2: Full test according to IEC 62031:2018 & EN IEC 62031:2020 has been considered on LED module. (total 6 pages)

Attachment 3: Full test according to IEC 61347-1:2015+A1:2017 & IEC 61347-2-13:2014+A1:2016 & EN 61347-1:2015+A1:2021 & EN 61347-2-13:2014+A1:2017 have been considered on PCB module. (total 4 pages);

Attachment 4: Full test according to IEC 61347-1:2015+A1:2017 & IEC 61347-2-11:2001+A1:2017 &

EN 61347-1:2015+A1:2021 & EN 61347-2-11:2001+A1:2019 have been considered on wireless charging module. (total 4 pages);

Attachment 5: Full test according to Standard EN 62368-1:2014+A11:2017 on PCB module and Wireless charging module. (total 2 page);

Attachment 6: PCB layout and circuit for PCB module. (total 2 page)

Attachment 7: Pictures of test sample. (total 8 pages);

Summary of testing:

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

Determination of the test result includes consideration of measurement uncertainty from the test equipment and the test methods.

Tests performed (name of test and test clause):

This report replaces and cancels the test report No.: AAOG-19NO1558LTSHP, which including following additions:

- Updated standard from IEC 60598-1:2014+A1:2017 & EN 60598-1:2015 + A1:2018 to IEC 60598-1:2020 & EN IEC 60598-1:2021.
- Updated standard from IEC 62031:2008+A1:2012+A2:2014 & EN 62031:2008+A1:2013 +A2:2015 to IEC 62031:2018 & EN IEC 62031:2020 on LED module.
- Updated standard from EN 61347-1:2015 to EN 61347-1:2015+A1:2021
- Add an alternative LED driver

After evaluation,

- Construction check(Clause 0-8,11) and thermal test(Clause 12) on model of YLCT03YL (test with new LED driver)
- Full test according to IEC 62031:2018 on LED module.

We performed the tests as following:
Full test on model YLCT03YL.

The below standard are also considered:

IEC 60598-2-4:2017

IEC 60598-1:2020

IEC 62493:2015

Testing location:

LCIE CHINA COMPANY LIMITED

Building 4, No. 518, Xin Zhuan Road, CaoHejing Songjiang High-Tech Park, Shanghai P.R.C (201612)

EN IEC 60598-1:2021 EN 60598-2-4:2018 EN 62493:2015	

Summary of compliance with National Differences (List of countries addressed):

EU

☒ **The product fulfils the requirements of EN 60598-2-4:2018 used in conjunction with EN IEC 60598-1:2021.**

☒ **The product fulfils the requirements of BS EN 60598-2-4:2018 used in conjunction with BS EN IEC 60598-1:2021.**

Statement concerning the uncertainty of the measurement systems used for the tests

(may be required by the product standard or client)

☐ **Internal procedure used for type testing through which traceability of the measuring uncertainty has been established:**

Procedure number, issue date and title:

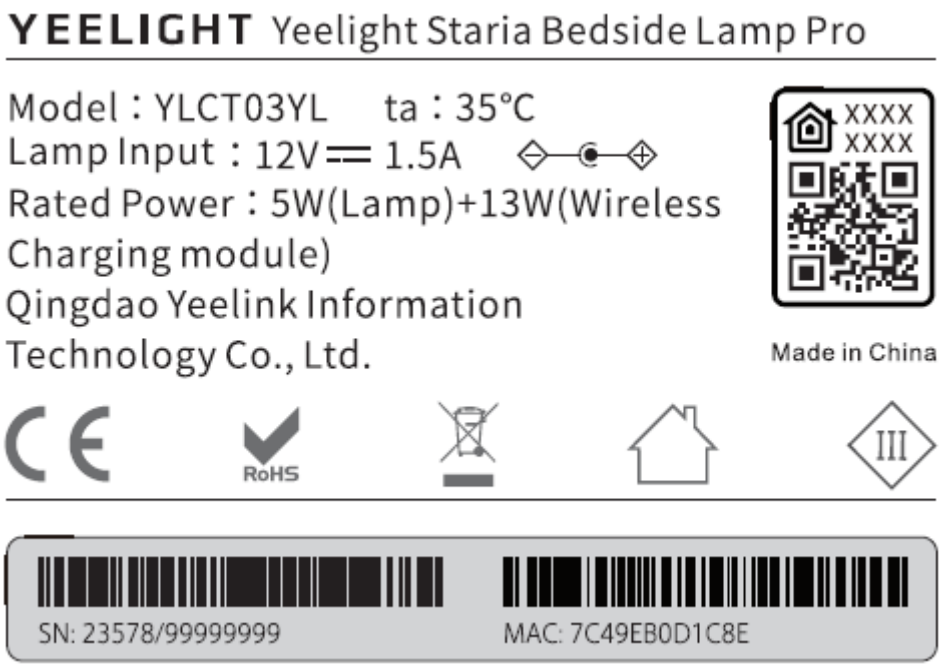
Calculations leading to the reported values are on file with the NCB and testing laboratory that conducted the testing.

☐ **Statement not required by the standard used for type testing**

(Note: When IEC or ISO standard requires a statement concerning the uncertainty of the measurement systems used for tests, this should be reported above. The informative text in parenthesis should be delete in both cases after selecting the applicable option)

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.



Remarks:

The height of all letters shall be at least 2 mm;

The symbols should be at least 5mm;

The height of WEEE marking shall be at least 7 mm;

The height of CE mark shall not be less than 5mm;

In the UK market, the label must be marked with "**UKCA**" symbol.

The name and address of importer and the batch number will be on label when in EU market.

Only markings in English and German Language present on the sample tested were checked and validated during this examination.

The text required by the standard should be translated into the official language of the country where the appliance will be sold.

Test item particulars.....:	Portable luminaire
Classification of installation and use.....:	For indoor use only
Supply Connection.....:	DC connector for luminaire （LED driver with plug）
.....:	--
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 .....:	2022-01-13
Date (s) of performance of tests.....:	2022-01-13 to 2022-02-17

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 IECEE 02:

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**

When differences exist; they shall be identified in the General product information section.

Name and address of factory (ies) .....:	Guangdong Changhong component technology Co.,Ltd. NO.2-1,Tongji West Road,Nantou,Zhongshan, Guangdong,China

General product information and other remarks:

The product in this report is Class III portable luminaire with Class II certificated LED driver, and the luminaire is for indoor use only.

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

4.4 (0)	**GENERAL TEST REQUIREMENTS**		
4.4 (0.3)	More sections applicable ..... :	Yes ☐ No ☒ Section/s:	—
4.4 (0.5)	Components	See Annex 1	—
4.4 (0.7)	**Information for luminaire design in light sources standards**		**—**
4.4 (0.7.2)	Light source safety standard ..... :	IEC/EN 62031	—
	Luminaire design in the light source safety standard		P

4.5 (2)	**CLASSIFICATION OF LUMINAIRES**		
4.5 (2.2)	Type of protection ..... :	Class III	
4.5 (2.3)	Degree of protection ..... :	IP 20	—
4.5 (2.4)	Luminaire suitable for direct mounting on normally flammable surfaces ..... :	Yes ☒ No ☐	
4.5 (2.5)	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 (3)	**MARKING**		
4.6 (3.2)	Mandatory markings		P
	Position of the marking		P
	Format of symbols/text		P
4.6 (3.3)	Additional information		P
	Language of instructions	English	P
4.6 (3.3.1)	Combination luminaires		N/A
4.6 (3.3.2)	Nominal frequency in Hz		N/A
4.6 (3.3.3)	Operating temperature		N/A
4.6 (3.3.5)	Wiring diagram		N/A

IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
4.6 (3.3.6)	Special conditions		N/A
4.6 (3.3.7)	Metal halide lamp luminaire – warning		N/A
4.6 (3.3.8)	Limitation for semi-luminaires		N/A
4.6 (3.3.9)	Power factor and supply current		N/A
4.6 (3.3.10)	Suitability for use indoors		P
4.6 (3.3.11)	Luminaires with remote control		N/A
4.6 (3.3.12)	Clip-mounted luminaire – warning		N/A
4.6 (3.3.13)	Specifications of protective shields		N/A
4.6 (3.3.14)	Symbol for nature of supply	⎓	P
4.6 (3.3.15)	Rated current of socket outlet		N/A
4.6 (3.3.16)	Rough service luminaire		N/A
4.6 (3.3.17)	Mounting instruction for type Y, type Z and some type X attachments		N/A
4.6 (3.3.18)	Non-ordinary luminaires with PVC cable		N/A
4.6 (3.3.19)	Protective conductor current in instruction if applicable		N/A
4.6 (3.3.20)	Provided with information if not intended to be mounted within arm's reach		N/A
4.6 (3.3.21)	Non replaceable and non-user replaceable light sources information provided	Non-user replaceable	P
4.6 (3.3.22)	Controllable luminaires, classification of insulation provided		N/A
4.6 (3.3.23)	Luminaires without controlgear provided with necessary information for selection of appropriate component		N/A
4.6 (3.3.24)	If not supplied with terminal block, information on the packaging		N/A
4.6 (3.3.25)	Luminaires employing light sources emitting UV on mains wiring, information provided		N/A
4.6 (3.3.26)	Wall mounted luminaire using external flexible cable or cord longer than 0.3 m, information provided		N/A
4.6 (3.4)	Test with water		P
	Test with hexane		P
	Legible after test		P
	Label attached		P
4.6.1 (-)	Luminaire not suitable for outdoor application		N/A
	Required symbol		N/A
	Information in the instructions		N/A

IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
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 (4)	**CONSTRUCTION**		
4.7 (4.2)	Components replaceable without difficulty		P
4.7 (4.3)	Wireways smooth and free from sharp edges		P
4.7 (4.4)	**Lampholders**		N/A
4.7 (4.4.1)	Integral lampholder		N/A
4.7 (4.4.2)	Wiring connection		N/A
4.7 (4.4.3)	Lampholder for end-to-end mounting		N/A
4.7 (4.4.4)	Positioning		N/A
	- pressure test (N) ..... :		—
	After test the lampholder comply with relevant standard sheets and show no damage		N/A
	After test on single-capped lampholder the lampholder have not moved from its position and show no permanent deformation		N/A
	- bending test (N) ..... :		—
	After test the lampholder has not moved from its position and show no permanent deformation		N/A
4.7 (4.4.5)	Peak pulse voltage		N/A
4.7 (4.4.6)	Centre contact		N/A
4.7 (4.4.7)	Parts in rough service luminaires resistant to tracking		N/A
4.7 (4.4.8)	Lamp connectors		N/A
4.7 (4.4.9)	Caps and bases correctly used		N/A
4.7 (4.4.10)	Light source for lampholder or connection according IEC 60061 not connected another way		N/A
4.7 (4.5)	**Starter holders**		N/A
	Starter holder in luminaires other than class II		N/A
	Starter holder class II construction		N/A
4.7 (4.6)	**Terminal blocks**		N/A
	Tails		N/A
	Unsecured blocks		N/A
4.7 (4.7)	**Terminals and supply connections**		**P**

IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
4.7 (4.7.1)	Contact to metal parts		N/A
4.7 (4.7.2)	Test 8 mm live conductor		N/A
	Test 8 mm earth conductor		N/A
4.7 (4.7.3)	Terminals for supply conductors		N/A
4.7 (4.7.3.1)	Welded method and material		N/A
	- stranded or solid conductor		N/A
	- spot welding		N/A
	- welding between wires		N/A
	- Type Z attachment		N/A
	- mechanical test according to 15.6.2		N/A
	- electrical test according to 15.6.3		N/A
	- heat test according to 15.6.3.2.3 and 15.6.3.2.4		N/A
4.7 (4.7.4)	Terminals other than supply connection		N/A
4.7 (4.7.5)	Heat-resistant wiring/sleeves		N/A
4.7 (4.7.6)	Multi-pole plug		N/A
	- test at 30 N		N/A
4.7 (4.8)	**Switches**		**P**
	- adequate rating		P
	- adequate fixing		P
	- polarized supply		N/A
	- compliance with IEC 61058-1 for electronic switches		N/A
4.7 (4.9)	**Insulating lining and sleeves**		N/A
4.7 (4.9.1)	Retainment		N/A
	Method of fixing ..... :		N/A
4.7 (4.9.2)	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
4.7 (4.10)	**Double or reinforced insulation**		N/A
4.7 (4.10.1)	No contact, mounting surface – accessible metal parts – wiring of basic insulation		N/A
	Safe installation fixed luminaires		N/A
	Capacitors and switches		N/A

IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
4.7 (4.10.2)	Assembly gaps:		N/A
	- not coincidental		N/A
	- no straight access with test probe		N/A
4.7 (4.10.3)	Retainment of insulation:		N/A
	- fixed		N/A
	- unable to be replaced; luminaire inoperative		N/A
	- sleeves retained in position		N/A
	- lining in lampholder		N/A
4.7 (4.10.4)	Protective impedance device		N/A
	Basic and 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 test (a) in 14.2 of IEC 60065		N/A
4.7 (4.11)	**Electrical connections and current-carrying parts**		**P**
4.7 (4.11.1)	Contact pressure		P
4.7 (4.11.2)	Screws:		N/A
	- self-tapping screws		N/A
	- thread-cutting screws		N/A
4.7 (4.11.3)	Screw locking:		N/A
	- spring washer		N/A
	- rivets		N/A
4.7 (4.11.4)	Material of current-carrying parts		P
4.7 (4.14.7)	No contact to wood or mounting surface		P
4.7 (4.14.7)	Electro-mechanical contact systems		N/A
4.7 (4.12)	**Screws and connections (mechanical) and glands**		N/A
4.7 (4.12.1)	Screws not made of soft metal		N/A
	Screws of insulating material		N/A
	Torque test: torque (Nm); part..... :		N/A
	Torque test: torque (Nm); part..... :		N/A
	Torque test: torque (Nm); part..... :		N/A
4.7 (4.12.2)	Screws with diameter < 3 mm screwed into metal		N/A

IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
4.7 (4.12.4)	Locked connections:		N/A
	- fixed arms; torque (Nm) ..... :		N/A
	- lampholder; torque (Nm) ..... :		N/A
	- push-button switches; torque 0,8 Nm ..... :		N/A
4.7 (4.12.5)	Screwed glands; force (Nm)..... :		N/A
4.7 (4.13)	**Mechanical strength**		**P**
4.7 (4.13.1)	Impact tests:		P
	- fragile parts; energy (Nm) ..... :		N/A
	- other parts; energy (Nm)..... :	Enclosure:0,5Nm	P
	1) live parts		P
	2) linings		P
	3) protection		P
	4) covers		P
4.7 (4.13.2)	Metal parts have adequate mechanical strength		N/A
4.7 (4.13.3)	Straight test finger		N/A
4.7 (4.13.4)	Rough service luminaires		N/A
	- 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 (4.13.6)	Tumbling barrel		N/A
4.7 (4.14)	**Suspensions, fixings and means of adjusting**		**P**
4.7 (4.14.1)	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 control gear without fixing devices		N/A
4.7 (4.14.2)	Load to flexible cables		N/A

IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
	Mass (kg) ..... :		—
	Stress in conductors (N/mm²) ..... :		N/A
	Mass (kg) of semi-luminaire ..... :		N/A
	Bending moment (Nm) of semi-luminaire ..... :		N/A
4.7 (4.14.3)	Adjusting devices:		P
	- flexing test; number of cycles..... :	1500	P
	- strands broken ..... :	<50%	P
	- electric strength test afterwards	See 10,2 for details	P
4.7 (4.14.4)	Telescopic tubes: cords not fixed to tube; no strain on conductors		N/A
4.7 (4.14.5)	Guide pulleys		N/A
4.7 (4.14.6)	Strain on socket-outlets		N/A
4.7 (4.15)	**Flammable materials**		**P**
	- glow-wire test 650°C ..... :	below	P
	- spacing ≥30 mm		N/A
	- screen withstanding test of 13.3.1		N/A
	- screen dimensions		N/A
	- no fiercely burning material		P
	- thermal protection		N/A
	- electronic circuits exempted		N/A
4.7 (4.15.2)	Luminaires made of thermoplastic material with lamp control gear		N/A
	a) construction		N/A
	b) temperature sensing control		N/A
	c) surface temperature		N/A
4.7 (4.16)	**Luminaires for mounting on normally flammable surfaces**		N/A
	No lamp control gear..... :	(compliance with Section 12)	N/A
	Provided with adaptor for a track meet the requirements for direct mounting on normally flammable surfaces		N/A
4.7 (4.16.1)	Lamp control gear spacing:		N/A
	- spacing 35 mm		N/A
	- spacing 10 mm		N/A
4.7 (4.16.2)	Thermal protection:		N/A
	- in lamp control gear		N/A
	- external		N/A

IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
	- fixed position		N/A
	- temperature marked lamp control gear		N/A
4.7 (4.16.3)	Design to satisfy the test of 12.6	(see clause 12.6)	N/A
4.7 (4.17)	**Drain holes**		N/A
	Clearance at least 5 mm		N/A
4.7 (4.18)	**Resistance to corrosion**		N/A
4.7 (4.18.1)	- rust-resistance		N/A
4.7 (4.18.2)	- season cracking in copper		N/A
4.7 (4.18.3)	- corrosion of aluminium		N/A
4.7 (4.19)	Ignitors compatible with ballast		N/A
4.7 (4.20)	Rough service vibration		N/A
4.7 (4.21)	**Protective shield**		N/A
4.7 (4.21.1)	Shield fitted if tungsten halogen lamps or metal halide lamps		N/A
	Shield of glass if tungsten halogen lamps		N/A
4.7 (4.21.2)	Particles from a shattering lamp not impair safety		N/A
4.7 (4.21.3)	No direct path		N/A
4.7 (4.21.4)	Impact test on shield		N/A
	Glow-wire test on lamp compartment..... :	below	N/A
4.7 (4.22)	Attachments to lamps not cause overheating or damage		N/A
4.7 (4.23)	Semi-luminaires comply Class II		N/A
4.7 (4.24)	**Photobiological hazards**		**P**
4.7 (4.24.1)	No excessive UV radiation if tungsten halogen lamps and metal halide lamps (Annex P)		N/A
4.7 (4.24.2)	Retinal blue light hazard		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 3.2.23		N/A
	b) Portable and handheld luminaires		N/A
	- marking according 3.2.23 if RG1 exceeded at 200 mm according to IEC/TR 62778		N/A

IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
	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/62778		N/A
4.7 (4.25)	**Mechanical hazard**		**P**
	No sharp point or edges		P
4.7 (4.26)	**Short-circuit protection**		N/A
4.7 (4.26.1)	Adequate means of uninsulated accessible SELV or PELV parts		N/A
4.7 (4.26.2)	Short-circuit test with test chain according 4.26.3		N/A
	Supply source ES1 PSE		N/A
	Test chain not melt through		N/A
	Test sample not exceed values of Table 12.1 and 12.2		N/A
4.7 (4.27)	**Terminal blocks with integrated screwless protective earthing contacts**		N/A
	Test according Annex V		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 (4.28)	**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 a lamp can degrade the fixing		N/A
	Not outside the luminaire enclosure		N/A
	Test of adhesive fixing:		N/A
	Max. temperature on adhesive material (°C) .....:		—
	100 cycles between t_{min} and t_{max}		N/A
	Temperature sensing control still in position		N/A
4.7 (4.29)	**Luminaires with non-replaceable light source**		N/A
	Not possible to replace light source		N/A
	Live part not accessible after parts have been opened by hand or tools		N/A

IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
4.7 (4.30)	**Luminaires with non-user replaceable light source**		**P**
	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		P
4.7 (4.31)	**Insulation between circuits**		N/A
	Circuits insulated from LV supply fulfil requirements according 4.31.1 – 4.31.3		N/A
	Controllable luminaires requiring same level of insulation for all components, the insulation between control terminals and LV supply fulfil requirements according 4.31.1 – 4.31.3		N/A
4.7 (4.31.1)	SELV or PELV circuits		P
	Used SELV or PELV source	Certificated Class II LED driver	P
+	Voltage ≤ ELV		N/A
	Insulating of SELV or PELV circuits from LV supply		N/A
	Insulating of SELV or PELV circuits from other non SELV or PELV circuits		N/A
	Insulating of SELV or PELV circuits from FELV		N/A
	Insulating of SELV or PELV circuits from other SELV or PELV circuits		N/A
	SELV or PELV circuits insulated from accessible parts according Table X.1		N/A
	Plugs not able to make any electrical contact with socket-outlets of other voltage systems		N/A
	Socket outlets does not admit plugs of other voltage systems		N/A
	Plugs and socket-outlets does not have protective conductor contact		N/A
4.7 (4.31.2)	FELV circuits		N/A
	Used FELV source		N/A
	Voltage ≤ ELV		N/A
	Insulating of FELV circuits from LV supply		N/A
	FELV circuits insulated from accessible parts according Table X.1		N/A
	Plugs not able to make any electrical contact with socket-outlets of other voltage systems		N/A
	Socket outlets does not admit plugs of other voltage systems		N/A
	Socket-outlets have protective conductor contact		N/A

IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
4.7 (4.31.3)	Other circuits		P
	Other circuits insulated from accessible parts according Table X.1	Certificated Class II LED driver	P
	Class II construction with equipotential bonding for protection against indirect contacts with live parts:		N/A
	- conductive parts are connected together		N/A
	- test according 7.2.3		N/A
	- conductive part does not cause an electric shock in case of an insulation fault		N/A
	- equipotential bonding in master/slave applications		N/A
	- master luminaire provided with terminal for accessible conductive parts of slave luminaires		N/A
	- slave luminaire constructed as class I		N/A
4.7 (4.32)	**Overvoltage protective devices**		N/A
	Comply with IEC 61643-11		N/A
	External to controlgear and connected to earth:		N/A
	- only in fixed luminaires		N/A
	- only connected to protective earth		N/A
4.7 (4.33)	**Luminaire powered via information technology communication cabling**		N/A
	Requirements for Class III luminaire		N/A
	Rated voltage within the range of ES1 and 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 (4.34)	**Electromagnetic fields (EMF)**		**P**
	No harmful electromagnetic fields		P
4.7 (4.35)	**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 (4.36)	**Track-mounted luminaires**		N/A
	Test in accordance with Annex A of IEC60570:2003/AMD2:2019		N/A

IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
4.7.1 (-)	Insulation not damaged when moving, adjusting or placing on support		N/A
4.7.2 (-)	Wiring fixed, to avoid rubbing		N/A
	Carrier or clips of insulation material or with insulating lining		N/A
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
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	below	N/A
	Compliance to clause 13.4		N/A

4.8 (11)	**CREEPAGE DISTANCES AND CLEARANCES**		
4.8 (11.2.1)	Impulse withstand category (Normal category II)	Category II ☐ Category III ☐	—

IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
	Category III according Annex U		N/A
	Protected against pollution, reduced creepage and clearance according Annex P of IEC 61347-1		N/A
4.8 (11.2.2)	Creepage distances for frequency up to 30 kHz	below	N/A
	Creepage distances for frequency over 30 kHz:		N/A
	- Controlgear marked with $\hat{U}_{OUT}$ and f_{UOUT} according IEC 61347-1, clause 7.1, item w	below	N/A
	- Requirements according IEC 60664-4 for controlgear not covered by IEC 61347	below	N/A
4.8 (11.2.3)	Clearances for frequency up to 30 kHz	below	N/A
	Clearances distances for frequency over 30 kHz:		N/A
	- Controlgear marked with U_P	below	N/A
	- Requirements according IEC 60664-4 for controlgear not covered by IEC 61347	below	N/A
4.9 (7)	**PROVISION FOR EARTHING**		
4.9 (7.2.1 + 7.2.3)	Accessible metal parts		N/A
	Metal parts in contact with supporting surface		N/A
	Resistance < 0,5 Ω..... :		N/A
	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 Annex V		N/A
	Protective earthing of the luminaire not via built-in control gear		N/A
4.9 (7.2.2 + 7.2.3)	Protective earthing continuity in joints, etc.		N/A
4.9 (7.2.4)	Locking of clamping means		N/A
	Compliance with 4.7.3		N/A
4.9 (7.2.5)	Earth terminal integral part of connector socket		N/A
4.9 (7.2.6)	Earth terminal adjacent to mains terminals		N/A
4.9 (7.2.7)	Electrolytic corrosion of the protective earth terminal		N/A
4.9 (7.2.8)	Material of protective earth terminal		N/A
	Contact surface bare metal		N/A

IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
4.9 (7.2.10)	Class II luminaire for looping-in		N/A
	Double or reinforced insulation to functional earth		N/A
4.9 (7.2.11)	Protective earthing core coloured green-yellow		N/A
	Length of protective earthing conductor		N/A
4.9 (7.2.12)	PELV circuit connected to protective earth for functional purpose		N/A
4.10 (14)	**SCREW TERMINALS**		
	Separately approved; component list..... :	See Annex 1	N/A
	Part of the luminaire ..... :	below	N/A
4.10 (15)	**SCREWLESS TERMINALS AND ELECTRICAL CONNECTIONS**		
	Separately approved; component list..... :	See Annex 1	N/A
	Part of the luminaire ..... :	below	N/A
4.11 (5)	**EXTERNAL AND INTERNAL WIRING**		
4.11 (5.2)	**Supply connection and external wiring**		**P**
4.11 (5.2.1)	Means of connection ..... :	DC connector	P
	Outdoor luminaire has not PVC insulated external wiring if not Class III or SELV/PELV circuits ≤ 25 V AC/60 V DC/25 V peak interrupted DC voltage with frequency 10Hz -200 Hz or protected from outdoor environment		N/A
4.11 (5.2.2)	Type of cable..... :		N/A
	Nominal cross-sectional area (mm²) ..... :		N/A
	Cables equal to IEC 60227 or IEC 60245		N/A
4.11 (5.2.3)	Type of attachment, X, Y or Z		N/A
4.11 (5.2.5)	Type Z not connected to screws		N/A
4.11 (5.2.6)	Cable entries:		N/A
	- suitable for introduction		N/A
	- adequate degree of protection		N/A
4.11 (5.2.7)	Cable entries through rigid material have rounded edges		N/A
4.11 (5.2.8)	Insulating bushings:		N/A
	- suitably fixed		N/A
	- material in bushings		N/A

IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
	- material not likely to deteriorate		N/A
	- tubes or guards made of insulating material		N/A
4.11 (5.2.9)	Locking of screwed bushings		N/A
4.11 (5.2.10)	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		P
4.11 (5.2.10.1)	Cord anchorage for type X attachment:		N/A
	a) at least one part fixed		N/A
	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 (5.2.10.2)	Adequate cord anchorage for type Y and type Z attachment		P
4.11 (5.2.10.3)	Tests:		P
	- impossible to push cable; unsafe		P
	- pull test: 25 times; pull (N) ..... :	60	P
	- torque test: torque (Nm) ..... :	0,15	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 (5.2.10.4)	Luminaire with/designed for use with supply cord with maximum current of 2A:		N/A
	- Ordinary Class III luminaire supplied with SELV ≤ 25V RMS/60V DC		N/A

IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
	- Ordinary Class III luminaire supplied with PELV ≤ 12V RMS/30V DC		N/A
	- Other than ordinary Class III luminaire supplied with voltage ≤ 12V RMS/30V DC		N/A
	Pull test of 30 N		N/A
4.11 (5.2.11)	External wiring passing into luminaire		N/A
4.11 (5.2.12)	Looping-in terminals		N/A
4.11 (5.2.13)	Wire ends not tinned		N/A
	Wire ends tinned: no cold flow		N/A
4.11 (5.2.14)	Mains plug same protection		N/A
	Class III luminaire plug		N/A
	No unsafe compatibility		N/A
4.11 (5.2.15)	Connectors for Class III luminaires (IEC 60603 or IEC 62680)		N/A
4.11 (5.2.16)	Appliance inlets (IEC 60320)		N/A
	Installation couplers (IEC 61535)		N/A
	Appliance inlet or connector systems (IEC 61984)		N/A
4.11 (5.2.17)	No standardized interconnecting cables properly assembled		N/A
4.11 (5.2.18)	Used plug in accordance with		N/A
	- IEC 60083		N/A
	- other standard		N/A
4.11 (5.3)	**Internal wiring**		**P**
4.11 (5.3.1)	Internal wiring of suitable size and type		P
	Through wiring		N/A
	- not delivered/ mounting instruction		N/A
	- factory assembled		N/A
	- socket outlet loaded (A) ..... :		N/A
	- temperatures ..... :	below	N/A
	Green-yellow for protective earth only		N/A
4.11 (5.3.1.1)	Internal wiring connected directly to fixed wiring		N/A

IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
	Cross-sectional area (mm²)..... :		N/A
	Insulation thickness (mm) ..... :		N/A
	Extra insulation added where necessary		N/A
4.11 (5.3.1.2)	Internal wiring connected to fixed wiring via internal current-limiting device		P
	Cross-sectional area (mm²)..... :	See CDF	P
4.11 (5.3.1.3)	Double or reinforced insulation for class II		N/A
4.11 (5.3.1.4)	Conductors without insulation		N/A
4.11 (5.3.1.5)	SELV or PELV current-carrying parts		P
4.11 (5.3.1.6)	Insulation thickness other than PVC or rubber		N/A
4.11 (5.3.2)	Sharp edges etc.		P
	No moving parts of switches etc.		N/A
	Joints, raising/lowering devices		N/A
	Telescopic tubes etc.		N/A
	No twisting over 360°		P
4.11 (5.3.3)	Insulating bushings:		N/A
	- suitable fixed		N/A
	- material in bushings		N/A
	- material not likely to deteriorate		N/A
	- cables with protective sheath		N/A
4.11 (5.3.4)	Joints and junctions effectively insulated		N/A
4.11 (5.3.5)	Strain on internal wiring		N/A
4.11 (5.3.6)	Wire carriers		N/A
4.11 (5.3.7)	Wire ends not tinned		N/A
	Wire ends tinned: no cold flow		N/A
4.11 (5.4)	**Test to determine suitability of conductors having a reduced cross-sectional area**		**P**
	Under test the temperature of the luminaire wiring insulation does not exceed the limits stated in Table 12.2	below	P
	No damage to luminaire wiring after test		P
4.11.1 (-)	Cord anchorage of luminaire for indoor use made of glass or ceramic not fixed or integral		N/A

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

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 mm² (mm²)..... :		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 (8)	**PROTECTION AGAINST ELECTRIC SHOCK**		
4.12 (8.2.1)	Live parts not accessible	Class III luminaire (12V⎓ input)	N/A
	Basic insulated parts not used on the outer surface without appropriate protection		N/A
	Basic insulated parts not accessible with standard test finger on portable, settable and adjustable luminaires		N/A
	Basic insulated parts not accessible with Ø 50 mm probe from outside, other types of luminaires		N/A
	Lamp and starterholders in portable and adjustable luminaires comply with double or reinforced insulation requirements		N/A
	Basic insulation only accessible under lamp or starter replacement		N/A
	Protection in any position		P
	Double-ended tungsten filament lamp		N/A
	Insulation lacquer not reliable		N/A
	Double-ended high-pressure discharge lamp		N/A
	Relevant warning according to 3.2.18 fitted to the luminaire		N/A
4.12 (8.2.2)	Portable luminaire adjusted in most unfavourable position		N/A
4.12 (8.2.3.a)	Class II luminaire:		N/A
	- basic insulated metal parts not accessible		N/A

IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
	- required insulation from live parts in compliance with Table X.1		N/A
	- glass protective shields not used as supplementary insulation		N/A
4.12 (8.2.3.b)	Metal BC lampholder in class I luminaires connected to protective earth		N/A
4.12 (8.2.3.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		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
	- interrupted DC voltage (V) ..... :		N/A
4.12 (8.2.3.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
	Pole not connected to earth insulated		N/A
	Class III luminaire only for connection to SELV or PELV		P
4.12 (8.2.4)	Portable luminaire has protection independent of supporting surface		N/A
4.12 (8.2.5)	Compliance with the standard test finger or relevant probe		N/A
4.12 (8.2.6)	Covers reliably secured		N/A
4.12 (8.2.7)	Luminaire other than below with capacitor $>$ 0,5 μF not exceed 50 V 1 min after disconnection		N/A
	Portable luminaire with capacitor $>$ 0,1 μF (0,25) not exceed 34 V 1 s after disconnection		N/A

IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
	Other luminaires with capacitor > 0,1 μF (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 (12)	**ENDURANCE TEST AND THERMAL TEST**		
4.13 (-)	If IP > IP 20 relevant test of (12.4), (12.5), (12.6) and (12.7) after (9.2) but before (9.3) specified in 4.14		—
4.13 (12.2)	**Selection of lamps and ballasts**		**—**
	Lamp used according Annex B	(Lamp used see below)	—
	Controlgear if separate and not supplied	(Controlgear used see below)	—
4.13 (12.3)	**Endurance test**		**P**
	a) mounting-position ..... :	Normal position	—
	b) test temperature (°C) ..... :	45	—
	c) total duration (h) ..... :	240	—
	d) supply voltage (V) ..... :	1,1 Un(with LED driver)	—
	d) if not equipped with controlgear, constant voltage/current (V) or (A) ..... :	-	—
1.13 (12.3.1d)	d) Class III luminaires powered via information technology communication cable:		—
	- voltage under normal operation (V) ..... :		—
	- voltage under abnormal operation (V) ..... :		
	e) luminaire ceases to operate		—
	f) luminaire with a constant light output function		N/A
4.13 (12.3.2)	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 (12.4)	**Thermal test (normal operation)**	(below)	P
4.13 (12.5)	**Thermal test (abnormal operation)**	(below)	P
4.13 (12.6)	**Thermal test (failed lamp control gear condition):**		N/A

IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
4.13 (12.6.1)	Through wiring or looping-in wiring loaded by a current of (A) ..... :		—
	- case of abnormal conditions ..... :		—
	- electronic lamp control gear		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 (12.6.2)	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 (12.7)	**Thermal test (failed lamp control gear in plastic luminaires):**		N/A
4.13 (12.7.1)	Luminaire without temperature sensing control		N/A
4.13 (12.7.1.1)	Luminaire with fluorescent lamp ≤ 70W		N/A
	Test method 12.7.1.1 or Annex W ..... :		—
	Test according to 12.7.1.1:		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 W:		N/A
	- case of abnormal conditions ..... :		—
	- measured winding temperature (°C): at 1,1 Un ..... :		—
	- measured temperature of fixing point/exposed part (°C): at 1,1 Un ..... :		—
	- calculated temperature of fixing point/exposed part (°C) ..... :		—
	Ball-pressure test .....:	below	N/A

IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
4.13 (12.7.1.2)	Luminaire with discharge lamp, fluorescent lamp > 70W, transformer > 10 VA		N/A
	- case of abnormal conditions ..... :		—
	- measured winding temperature (°C): at 1,1 Un ..... :		—
	- measured temperature of fixing point/exposed part (°C): at 1,1 Un ..... :		—
	- calculated temperature of fixing point/exposed part (°C) ..... :		—
	Ball-pressure test ..... :	below	N/A
4.13 (12.7.1.3)	Luminaire with short circuit proof transformers ≤ 10 VA		N/A
	- 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 (12.7.2)	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 ..... :		—
	- highest measured temperature of fixing point/ exposed part (°C): ..... :		—
	Ball-pressure test: ..... :	below	N/A
4.13 (-)	Luminaire for indoor use tested in overturned position (overturns < 15°)	Not overturn	P

4.14 (9)	**RESISTANCE TO DUST AND MOISTURE**		
4.14 (-)	If IP > IP 20 the order of tests as specified in clause 4.13		N/A
4.14 (9.2)	Tests for ingress of dust, solid objects and moisture:		P
	- classification according to IP..... :	IP 20	—
	- mounting position during test ..... :	Normal position	—
	- fixing screws tightened; torque (Nm) ..... :	N/A	—
	- tests according to clauses..... :	Cl 9,2,0	—
	- electric strength test afterwards	See 10,2 for details	P
	a) no deposit in dust-proof luminaire		N/A
	b) no talcum in dust-tight luminaire		N/A

IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
	c) no trace of water on current-carrying parts or on insulation where it could become a hazard		N/A
	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		N/A
4.14 (9.3)	Humidity test 48 h		P

4.15 (10)	**INSULATION RESISTANCE AND ELECTRIC STRENGTH**		
4.15 (10.2.1)	Insulation resistance test		P
	Cable or cord covered by metal foil or replaced by a metal rod of mm Ø :	Covered by metal foil	P
	Insulation resistance (MΩ):		P
	SELV or PELV:		P
	- between current-carrying parts of different polarity:	Certificated Class II LED driver	N/A
	- between current-carrying parts and mounting surface..... :	> 100 MΩ	P
	- between current-carrying parts and metal parts of the luminaire..... :	> 100 MΩ	P
	- 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 Section 5 ..... :		N/A
	Other than SELV or PELV:		P
	- between live parts of different polarity ..... :	Certificated Class II LED driver	N/A
	- between live parts and mounting surface ..... :	> 100 MΩ	P
	- between live parts and metal parts ..... :	> 100 MΩ	P

IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
	- between 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 Section 5 ..... :		N/A
4.15 (10.2.2)	Electric strength test	Covered by metal foil	P
	Dummy lamp		N/A
	Luminaires with ignitors after 24 h test		N/A
	Luminaires with manual ignitors		N/A
	Luminaires with ignitors provided with ballasts conforming to IEC 61347-2-9		N/A
	SELV or PELV:		P
	- between current-carrying parts of different polarity:	Certificated Class II LED driver	N/A
	- between current-carrying parts and mounting surface..... :	500V	P
	- between current-carrying parts and metal parts of the luminaire..... :	500V	P
	- 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 Section 5 ..... :		N/A
	Other than SELV/PELV:		P
	- between live parts of different polarity ..... :	Certificated Class II LED driver	N/A
	- between live parts and mounting surface ..... :	2960V	P
	- between live parts and metal parts ..... :	2960V	P
	- between 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 Section 5 ..... :		N/A
4.15 (10.3)	Touch current (mA) ..... :	Class III luminaire	N/A
	Protective conductor current (mA) ..... :		N/A

4.16 (13)	**RESISTANCE TO HEAT, FIRE AND TRACKING**		
4.16 (13.2.1)	Ball-pressure test ..... :	below	P

IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
4.16 (13.3.1)	Needle-flame test (10 s) ..... :	below	P
4.16 (13.3.2)	Glow-wire test (650°C) ..... :	below	P
4.16 (13.4)	Proof tracking test (IEC 60112) ..... :	below	N/A

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

above	**TABLE I: Creepage distances and clearances**						**N/A**
	Minimum distances (mm) for a.c. up to 30 kHz sinusoidal voltages						
	Applicable part of IEC 60598-1 Table 11.1.A*, 11.1.B* and 11.2* and Table U.1*						
Distances	**Insulation type ****	**Measured clearance**	**Required**		**Measured creepage**	**Required**	
			clearance	***Table**		**creepage**	***Table**
Distance 1:	-	-	-	-	-	-	-
Working voltage (V) .....:					-		—
PTI .....:					< 600 ☐ ≥ 600 ☐		—
Pulse voltage or U_P if applicable (kV) .....:					-		—
Supplementary information:-							
Distance 2:	-	-	-	-	-	-	-
Working voltage (V) .....:					-		—
PTI .....:					< 600 ☐ ≥ 600 ☐		—
Pulse voltage or U_P if applicable (kV) .....:					-		—
Supplementary information:-							
Distance 3:	-	-	-	-	-	-	-
Working voltage (V) .....:					-		—
PTI .....:					< 600 ☐ ≥ 600 ☐		—
Pulse voltage or U_P if applicable (kV) .....:					-		—
Supplementary information:-							
** Insulation type: B – Basic; S – Supplementary; R – Reinforced. See also IEC 60598-1 Annex M.							

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

above	**TABLE II: Creepage distances and clearances**						**N/A**
	Minimum distances (mm) for a.c. 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:-							
** Insulation type: B – Basic; S – Supplementary; R – Reinforced.							

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

above	**TABLE: Ball Pressure Test of Thermoplastics**			**P**
Allowed impression diameter (mm) ..... :		**2**		—
Object/ Part No./ Material	Manufacturer/ trademark	Test temperature (°C)	Impression diameter (mm)	
PCB	-	125	1,0	
DC connector	-	125	1,0	
Enclosure	-	75	0,8	
Supplementary information:				

above	**TABLE: Needle-flame test (IEC 60695-11-5)**				**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
DC connector	-	10	No	0	P
PCB	-	10	No	0	P
Supplementary information:					

above	**TABLE: Glow-wire test (IEC 60695-2-11)**			**P**
Glow wire temperature ..... :		650°C		—
Object/ Part No./ Material	Manufacturer/ trademark	Ignition of specified layer Yes/No	Duration of burning (tb) (s)	Verdict
Lampshade	-	No	0	P
Enclosure	-	No	0	P
Supplementary information:				

above	**TABLE: Proof tracking test (IEC 60112)**				**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:					

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

ANNEX 1	TABLE: Critical components information					
Object / part No.	Code	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity[1)]
LED driver	B	SHENZHEN HUONIU TECHNOLOGY CO.,LTD	HNTL120150WX	Class II, IP20, Independent type, ta:35°C, tc:70°C Input：220-240V~ 50/60Hz, 0.45A Max Output：12V⎓, 1.5A，18W Max, SELV	EN 61347-1: 2015 EN 61347-2-13: 2014 +A1: 2017	INTERTEK CB/ SE-89783 Report No.170914127GZU-001
LED driver	D	Shenzhen Aquilstar Technology Co., Ltd.	ASLP26W-120150	Class II, IP20, Independent type, ta:40°C, tc:75°C Input：100-240V~ 50/60Hz, 0.5A Output：12V⎓, 1.5A，18W SELV	EN 61347-1: 2015 EN 61347-2-13: 2014 +A1: 2017	ATT Report 22SLES01075 00341
LED	C	HONGLI Tronic	HL-AS-2835H421W-2C-S1-08L-PCT-HR5	V_F: 5.6-6.8V; I_F:80mA; Viewing Angle: 120°; CCT: 2700-6500K	IEC 62471:2006 EN 62471:2008 IEC/TR 62778:2014	LCIE Test report No.AAOG-19AU2986L CSHP and AAOG-19NO1614L TSHP
MCPCB (For LED module)	C	QUANZHOU JINTIAN ELECTRON CIRCUIT BOARD CO LTD	JAL-5	V-0, 130℃	EN IEC 60598-1:2021 EN 60598-2-4:2018	Tested with appliance UL/ E239807
Alt. MCPCB	D	XIAMEN LED BOARD ELECTRON-TECH CO LTD	LDB-04	V-0, 130℃	EN IEC 60598-1:2021 EN 60598-2-4:2018	Tested with appliance UL/ E347474
Alt. MCPCB	D	JIANGXI ZHONG XIN HUA ELECTRONICS INDUSTRY CO LTD	ZXH-3	V-0, 288℃	EN IEC 60598-1:2021 EN 60598-2-4:2018	Tested with appliance UL/ E331298
DC connector	C	MIANYANG HANQUAN TECHNOLOGY CO.LTD	DC-023	30V/1,5A	EN IEC 60598-1:2021 EN 60598-2-4:2018	Tested with appliance

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

Internal wire 1 (LED module to PCB)	C	GUANGZHOU FENGTAI MEIHUA CABLE CO LTD	10064	24AWG，105℃，30V	EN IEC 60598-1:2021 EN 60598-2-4:2018	Tested with appliance UL/ E204798
Internal wire 2 (between PCB, between PCB to DC connector)	C	XIN SHENG TERMINAL MFG LTD	1007	24AWG，80℃，300V	EN IEC 60598-1:2021 EN 60598-2-4:2018	Tested with appliance UL/ E328303
PCB module	C	GUANGDONG CHANGHONG COMPONENT TECHNOLOGY CO.,LTD	--	12V⎓, Max 1,5A	EN IEC 60598-1:2021 EN 60598-2-4:2018 EN 61347-1:2015+A1:2021 EN 61347-2-13:2014+A1:2017 EN 62368-1:2014 +A11:2017	Tested with appliance
Wireless charging module	C	GCteq Wireless （Shenzhen） Co.,Ltd.	YL-GCT-10W	Input Current: 0.9A Max@12VDC Full Load. No-Loading Input Power Consumption: At 12VDC,Average Standby Power Consumption≤ 0.20W. Output Characteristics: Wireless Charging Maximum Conversion Power 10W @ 12VDC Input，The Maximum Conversion Efficient Of 80%.	EN IEC 60598-1:2021 EN 60598-2-4:2018 EN 61347-1:2015+A1:2021 EN 61347-2-11:2001+A1:2019 EN 62368-1:2014 +A11:2017	Tested with appliance
Lampshade	C	TEIJIN POLYCARBONATE CHINA LTD	L-1225U(#)（f1）L-1225V(#)（f1）L-1225Z(#)（f1）	HB	EN IEC 60598-1:2021 EN 60598-2-4:2018	Tested with appliance UL/ E245526
Enclosure	C	FORMOSA CHEMICALS & FIBRE CORP PLASTICS DIV	AG15E1	HB	EN IEC 60598-1:2021 EN 60598-2-4:2018	Tested with appliance UL/ E162823

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

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

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

ANNEX 2	**TABLE: Thermal tests of Section 12**		
	Type reference ..... :	YLCT03YL	—
	Lamp used ..... :	LEDs	—
	Lamp control gear used ..... :	HNHL12015WX	—
	Mounting position of luminaire ..... :	Normal position	—
	Supply wattage (W) ..... :	21.5W(with Wireless charging module full power operation)	—
	Supply current (A) ..... :	0,15A	—
	Temperatures in test 1 - 4 below are corrected for ta (°C) ..... :	-	—
	- abnormal operating mode ..... :	LED driver output short-circuit	—
4.13 (12.4)	- test 1: rated voltage	240V	P
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage or 1,1 times constant voltage/current ..... :	1,06 x 240V	P
	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage ..... :		N/A
	Through wiring or looping-in wiring loaded by a current of A during the test ..... :		N/A
4.13 (12.5)	- 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 ..... :	1,1 x 240V	P

Temperature measurements (°C)

Part	Ambient	Cl. 12.4 – normal				Cl. 12.5 – abnor.	
		test 1	test 2	test 3	limit	test 4	limit
PCB 1 (for LED module)	35	-	59	-	130	-	-
Internal wire 1	35	-	52	-	105	-	-
Internal wire 2	35	-	46	-	80	-	-
DC connector	35	-	46	-	Ref.	-	-
PCB (for PCB module)	35	-	54	-	Ref.	-	-
PCB (for wireless charger module)	35	-	59	-	Ref.	-	-
Touch surface (for switch)	35	-	59	-	75	-	-
Adjustable device (plastic)	35	-	42	-	75	-	-
Adjustable device (metal)	35	-	48	-	60	-	-
Mounting surface	35	-	44	-	90	45	130
Enclosure (driver)	35	-	58	-	75	-	-

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

Tc point (driver)	35	61,8	63	-	75	64	85
Plug (driver)	35	-	39	-	70	-	-
Supplementary information: Ref. stands for reference							

ANNEX 2	**TABLE: Thermal tests of Section 12**		
	Type reference.....:	YLCT03YL	—
	Lamp used .....:	LEDs	—
	Lamp control gear used .....:	ASLP26W-120150	—
	Mounting position of luminaire .....:	Normal position	—
	Supply wattage (W) .....:	21.5W(with Wireless charging module full power operation)	—
	Supply current (A) .....:	0,15A	—
	Temperatures in test 1 - 4 below are corrected for ta (°C) .....:	-	—
	- abnormal operating mode.....:	LED driver output short-circuit	—
4.13 (12.4)	- test 1: rated voltage	240V	P
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage or 1,1 times constant voltage/current .....:	1,06 x 240V	P
	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage.....:		N/A
	Through wiring or looping-in wiring loaded by a current of A during the test .....:		N/A
4.13 (12.5)	- 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 .....:	1,1 x 240V	P

Temperature measurements (°C)

Part	Ambient	Cl. 12.4 – normal				Cl. 12.5 – abnor.	
		test 1	test 2	test 3	limit	test 4	limit
Mounting surface	35	-	46,9	-	90	47	130
Tc point (driver)	35	60,1	62,9	-	75	66,1	85
Plug (driver)	35	-	38,5	-	70	-	-
Supplementary information: Ref. stands for reference							

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

ANNEX 3	**Screw terminals (part of the luminaire)**		
(14)	**SCREW TERMINALS**		N/A
(14.2)	Type of terminal.....:		—
	Rated current (A).....:		—
(14.3.2.1)	One or more conductors		N/A
(14.3.2.2)	Special preparation		N/A
(14.3.2.3)	Terminal size		N/A
	Cross-sectional area (mm²).....:		—
(14.3.3)	Conductor space (mm).....:		N/A
(14.4)	Mechanical tests		N/A
(14.4.1)	Minimum distance		N/A
(14.4.2)	Cannot slip out		N/A
(14.4.3)	Special preparation		N/A
(14.4.4)	Nominal diameter of thread (metric ISO thread) .....:	M	N/A
	External wiring		N/A
	No soft metal		N/A
(14.4.5)	Corrosion		N/A
(14.4.6)	Nominal diameter of thread (mm) .....:		N/A
	Torque (Nm).....:		N/A
(14.4.7)	Between metal surfaces		N/A
	Lug terminal		N/A
	Mantle terminal		N/A
	Pull test; pull (N).....:		N/A
(14.4.8)	Without undue damage		N/A

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

ANNEX 4	**Screwless terminals (part of the luminaire)**		
(15)	**SCREWLESS TERMINALS**		N/A
(15.2)	Type of terminal.....:		—
	Rated current (A).....:		—
(15.3.1)	Material		N/A
(15.3.2)	Clamping		N/A
(15.3.3)	Stop		N/A
(15.3.4)	Unprepared conductors		N/A
(15.3.5)	Pressure on insulating material		N/A
(15.3.6)	Clear connection method		N/A
(15.3.7)	Clamping independently		N/A
(15.3.8)	Fixed in position		N/A
(15.3.10)	Conductor size		N/A
	Type of conductor		N/A
(15.5)	Terminals and connections for internal wiring		N/A
(15.5.1)	Mechanical tests		N/A
(15.5.1.1.1)	Pull test spring-type terminals (4 N, 4 samples) .....:		N/A
(15.5.1.1.2)	Pull test pin or tab terminals (4 N, 4 samples) .....:		N/A
	Insertion force not exceeding 50 N		N/A
(15.5.1.2)	Permanent connections: pull-off test (20 N)		N/A
(15.5.2)	Electrical tests		N/A
	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
(15.6)	Terminals and connections for external wiring		N/A
(15.6.1)	Conductors		N/A

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

	Terminal size and rating		N/A
15.6.2	Mechanical tests		N/A
(15.6.2.1)	Pull test spring-type terminals or welded connections (4 samples); pull (N) .....:		N/A
(15.6.2.2)	Pull test pin or tab terminals (4 samples); pull (N) .....:		N/A
(15.6.3)	Electrical tests		N/A
	Tests according 15.6.3.1 + 15.6.3.2 in IEC 60598-1		N/A

(15.6.3.1) (15.6.3.2)	**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:										

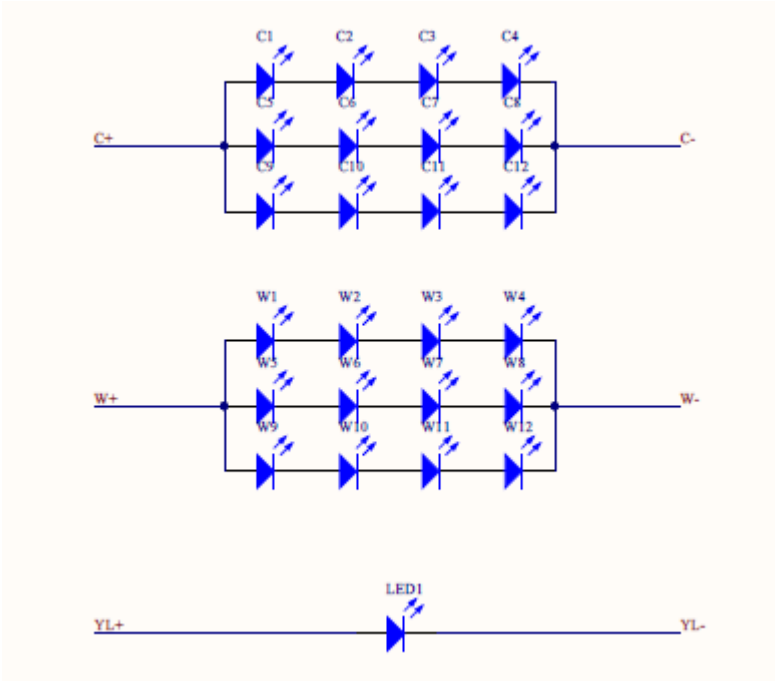
European group NATIONAL DIFFERENCES			
Clause	Requirement + Test	Result - Remark	Verdict
4.5 (3)	**MARKING**		
4.5 (3.3.101)	For luminaires not supplied with terminal block: Adequate warning on the package		N/A
4.6 (4)	**CONSTRUCTION**		
4.6 (4.11.6)	Electro-mechanical contact systems		N/A
4.10 (5)	**EXTERNAL AND INTERNAL WIRING**		
4.10 (5.2.1)	Connecting leads		N/A
	- without a means for connection to the supply		N/A
	- terminal block specified		N/A
	- relevant information provided		N/A
	- compliance with 4.6, 4.7.1, 4.7.2, 4.10.1, 11.2, 12 and 13.2 of Part 1		N/A
4.10 (5.2.2)	Cables equal to EN 50525		N/A
	Replace table 5.1 – Supply cord		N/A
4.12 (12)	**ENDURANCE TESTS AND THERMAL TESTS**		
4.12 (12.4.2c)	Thermal test (normal operation) see footnote c to table 12.2 relating to unsleeved fixed wiring		N/A
ZB	**ANNEX ZB, SPECIAL NATIONAL CONDITIONS (EN)**		
(3.3)	DK: power supply cords of class I luminaires with label		N/A
(4.5.1)	DK: socket-outlets		N/A
(5.2.1)	CY, DK, FI, GB: type of plug		N/A
ZC	**ANNEX ZC, NATIONAL DEVIATIONS (EN)**		
(4 & 5)	FR: Shuttered socket-outlets 10/16A		N/A
	FR: Safety requirements for high buildings (Arrêté du 30 décembre 2011 portant règlement de sécurité pour la construction des immeubles de grande hauteur et leur protection contre les risques d'incendie et de panique; Section VIII; Article GH 48, Eclairage) Glow-wire test for outer parts of luminaires:		N/A

European group NATIONAL DIFFERENCES			
Clause	Requirement + Test	Result - Remark	Verdict
	- 850 C for luminaires in stairways and horizontal travel paths		N/A
	- 650 C for indoor luminaires		N/A
(13.3)	GB: Requirements according to United Kingdom Building Regulation		N/A

IEC/EN 62031			
Clause	Requirement + Test	Result - Remark	Verdict

PCB layout

Diagram circuit



IEC/EN 62031			
Clause	Requirement + Test	Result - Remark	Verdict
4	**GENERAL REQUIREMENTS**		P
4.2	Classification		
	Built-in module ..... :	Yes ☐ No ☒	—
	Independent module ..... :	Yes ☐ No ☒	—
	Integral module ..... :	Yes ☒ No ☐	—
4.6	Independent modules comply with requirements in IEC 60598-1:2014/AMD1:2017		N/A
4.8	Modules with integrated controlgear providing SELV comply with requirements according to IEC 61347-1:2015/AMD1:2017 clause L.5 to L.11.	(see Annex 1)	N/A
6	**MARKING**		N/A
7	**TERMINALS**		N/A
8 (9)	**EARTHING**		N/A
9 (10)	**PROTECTION AGAINST ACCIDENTAL CONTACT WITH LIVE PARTS**		N/A
10 (11)	**MOISTURE RESISTANCE AND INSULATION(Refer to IEC 60598 part)**		P
11 (12)	**ELECTRIC STRENGTH**		N/A
12 (14)	**FAULT CONDITIONS**		P
- (14.1)	When operated under fault conditions the controlgear:		P
	- does not emit flames or molten material		P
	- does not produce flammable gases		P
	- protection against accidental contact not impaired		N/A
	Thermally protected controlgear does not exceed the marked temperature value		N/A
	Fault conditions: capacitors, resistors or inductors without proof of compliance with relevant specifications have been short-circuited or disconnected	(see appended table)	N/A
- (14.2)	Short-circuit of creepage distances and clearances if less than specified in clause 16 in Part 1 (after any reduction in 14.2 - 14.5)	(see appended table)	P
- (14.3)	Short-circuit or interruption of semiconductor devices	(see appended table)	N/A
- (14.4)	Short-circuit across insulation consisting of lacquer, enamel or textile	(see appended table)	P
- (14.5)	Short-circuit across electrolytic capacitors	(see appended table)	N/A
	Short-circuit or interruption of SPDs	(see appended table)	N/A
- (14.6)	After the tests has been carried out on three samples:		P

IEC/EN 62031			
Clause	Requirement + Test	Result - Remark	Verdict
	The insulation resistance ≥ 1 MΩ .....:		P
	No flammable gases		P
	No accessible parts have become live		N/A
	During the tests, a five-layer tissue paper, where the test specimen is wrapped, does not ignite		P
- (14.7)	Relevant fault condition tests with high-power a.c. supply and in turn to a d.c. supply		—
12.2	**Overpower condition**		**P**
	Module withstands overpower condition >15 min.		P
	Module with automatic protective device or power limiter, test performed 15 min. at limit.		N/A
	No fire, smoke or flammable gas is produced		P
	Molten material does not ignite tissue paper, spread below the module		P
14 (15)	**CONSTRUCTION**(Refer to the main standard IEC 60598-1)		P
15 (16)	**CREEPAGE DISTANCES AND CLEARANCES**		N/A
16 (17)	**SCREWS, CURRENT-CARRYING PARTS AND CONNECTIONS**		N/A
17 (18)	**RESISTANCE TO HEAT, FIRE AND TRACKING** (Refer to the main standard IEC 60598-1)		P
18	**RESISTANCE TO CORROSION**		N/A
20	**HEAT MANAGEMENT**		N/A
22	**PHOTOBIOLOGICAL SAFETY**		**P**
22.1	**UV radiation**		**N/A**
	Luminous radiation not exceed 2mW/klm		N/A
22.2	**Blue light hazard**		**P**
	Assessed according to IEC TR 62778		P
22.3	**Infrared radiation**		**N/A**
	Requirements for infrared radiation when required		N/A
A	**ANNEX A - TESTS**		**N/A**
	All tests performed in accordance with the advice given in Annex H of IEC 61347-1, if applicable		N/A
12 (14)	**TABLE: tests of fault conditions**		**P**
Part	**Simulated fault**		**Hazard**
LED	Nothing impairing safety		NO

IEC/EN 62031			
Clause	Requirement + Test	Result - Remark	Verdict

15 (16)	**TABLE: clearance and creepage distance measurements (mm)**							**N/A**
Applicable part of IEC 61347-1 Table 7 – 11*								
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) ..... :					-			—
Pulse voltage if applicable (kV) ..... :					-			—
Supplementary information: (Refer to the main standard IEC 60598-1)								
Distance 2:	-	-	-	-	-	-	-	
Working voltage (V) ..... :					-			—
Frequency if applicable (kHz) ..... :					-			—
PTI ..... :					< 600 ☐ ≥ 600 ☐			—
Peak value of the working voltage $\hat{U}_{out}$ if applicable (kV) ..... :					-			—
Pulse voltage if applicable (kV) ..... :					-			—
Supplementary information: (Refer to the main standard IEC 60598-1)								
Distance 3:	-	-	-	-	-	-	-	
Working voltage (V) ..... :					-			—
Frequency if applicable (kHz) ..... :					-			—
PTI ..... :					< 600 ☐ ≥ 600 ☐			—
Peak value of the working voltage $\hat{U}_{out}$ if applicable (kV) ..... :					-			—
Pulse voltage if applicable (kV) ..... :					-			—
Supplementary information: (Refer to the main standard IEC 60598-1)								

** Insulation type: B – Basic; S – Supplementary; R – Reinforced

IEC/EN 62031			
Clause	Requirement + Test	Result - Remark	Verdict
(A)	**ANNEX A - TEST TO ESTABLISH WHETHER A CONDUCTIVE PART IS A LIVE PART WHICH MAY CAUSE AN ELECTRIC SHOCK**		**N/A**
ANNEX 1	**LED MODULES WITH INTEGRAL CONTROLGEAR PROVIDING SELV**		**N/A**
(L.5)	**Protection against electric shock**		N/A
	Comply with 9.2 of IEC 61558-1		N/A
(L.6)	**Heating**		N/A
	No excessive temperatures in normal use		N/A
	Value if capacitor tc marked .....:		—
	Winding insulation classified as Class .....:		—
	Comply with tests of clause 14 of IEC 61558-1 with adjustments		N/A
(L.7)	**Short-circuit and overload protection**		N/A
	Comply with tests of clause 15 of IEC 61558-1 with adjustments		N/A
(L.8)	**Insulation resistance and electric strength**		N/A
(L.8.1)	Conditioned 48 h between 91 % and 95 %		N/A
(L.8.2)	Insulation resistance		N/A
	Between input- and output circuits not less than 5 MΩ .....:		N/A
	Between metal parts of class II convertors which are separated from live parts by basic insulation only and the body not less than 5 MΩ .....:		N/A
	Between metal foil in contact with the inner and outer surfaces of enclosures of insulating material not less than 2 MΩ .....:		N/A
(L.8.3)	Electric strength		N/A
	1) Between live parts of input circuits and live parts of output circuits .....:		N/A
	2) Over basic or supplementary insulation between:		N/A
	a) live parts having different polarity .....:		N/A
	b) live parts and body if intended to be connected to protective earth .....:		N/A
	c) accessible metal parts and a metal rod of the same diameter as the flexible cable or cord .....:		N/A
	d) live parts and an intermediate metal part .....:		N/A
	e) intermediate metal parts and the body .....:		N/A
	f) each input circuit and all other input circuits .....:		N/A

IEC/EN 62031			
Clause	Requirement + Test	Result - Remark	Verdict
	3) Over reinforced insulation between the body and live parts .....:		N/A
(L.9)	**Construction**		N/A
(L.9.1)	Transformer comply with 19.12 of IEC 61558-1 and 19 of IEC 61558-2-6		N/A
	HF transformer comply with 19 of IEC 61558-2-16		N/A
(L.10)	**Components**		N/A
	Protective devices comply with 20.6 – 20.11 of IEC 61558-1		N/A
(L.11)	**Creepage distances, clearances and distances through insulation**		N/A
	Creepage distances and clearances not less than in Clause 16		N/A
	Distance through insulation according Table L.5 in IEC 61347-1		N/A
	1) Basic distance through insulation		N/A
	Required distance (mm) .....:		—
	Measured (mm) .....:		N/A
	Supplementary information		—
	2) Supplementary distance through insulation		N/A
	Required distance (mm) .....:		—
	Measured (mm) .....:		N/A
	Supplementary information		—
	3) Reinforced distance through insulation		N/A
	Required distance (mm) .....:		—
	Measured (mm) .....:		N/A
	Supplementary information		—

IEC/EN 61347-2-13			
Clause	Requirement + Test	Result - Remark	Verdict

4 (4)	**GENERAL REQUIREMENTS**	**P**

6 (6)	**CLASSIFICATION**		**P**
	Built-in controlgear ..... :	Yes ☐ No ☒	-
	Independent controlgear..... :	Yes ☐ No ☒	-
	Integral controlgear ..... :	Yes ☒ No ☐	-
6 (-)	Auto-wound controlgear ..... :	Yes ☐ No ☒	-
	Separating controlgear ..... :	Yes ☐ No ☒	-
	Isolating controlgear ..... :	Yes ☐ No ☒	-
	SELV controlgear ..... :	Yes ☐ No ☒	-

7 (7)	**MARKING**	N/A

8 (10)	**PROTECTION AGAINST ACCIDENTAL CONTACT WITH LIVE PARTS**	P

9 (8)	**TERMINALS**	P

10 (9)	**PROVISION FOR PROTECTIVE EARTHING**	N/A

11 (11)	**MOISTURE RESISTANCE AND INSULATION**	P

12 (12)	**ELECTRIC STRENGTH**	**P**

14 (14)	**FAULT CONDITIONS**		**P**
- (14.1)	When operated under fault conditions the controlgear:		P
	- does not emit flames or molten material		P
	- does not produce flammable gases		
	- protection against accidental contact not impaired		P
	Thermally protected controlgear does not exceed the marked temperature value		N/A
	Fault conditions: capacitors, resistors or inductors without proof of compliance with relevant specifications have been short-circuited or disconnected	(see appended table)	P
- (14.2)	Short-circuit of creepage distances and clearances if less than specified in clause 16 in Part 1 (after any reduction in 14.2 - 14.5)	(see appended table)	P
- (14.3)	Short-circuit or interruption of semiconductor devices	(see appended table)	P
- (14.4)	Short-circuit across insulation consisting of lacquer, enamel or textile	(see appended table)	P
- (14.5)	Short-circuit across electrolytic capacitors	(see appended table)	P
	Short-circuit or interruption of SPDs	(see appended table)	P
14 (-)	Reversed voltage polarity if d.c. supplied control gear	(see appended table)	P
- (14.6)	After the tests has been carried out on three samples:		P

IEC/EN 61347-2-13			
Clause	Requirement + Test	Result - Remark	Verdict
	The insulation resistance 1 M ..... :		P
	No flammable gases		P
	No accessible parts have become live		P
	During the tests, a five-layer tissue paper, where the test specimen is wrapped, does not ignite		P
- (14.7)	Relevant fault condition tests with high-power a.c. supply and in turn to a d.c. supply		-
14 (-)	Temperature declared thermally protected lamp controlgear fulfil requirements in Annex C		N/A
15 (-)	**TRANSFORMER HEATING**		N/A
16 (15)	**CONSTRUCTION**		P
17 (16)	**CREEPAGE DISTANCES AND CLEARANCES**		P
18 (17)	**SCREWS, CURRENT-CARRYING PARTS AND CONNECTIONS**		P
19 (18)	**RESISTANCE TO HEAT, FIRE AND TRACKING**		P
20 (19)	**RESISTANCE TO CORROSION**		N/A
21 (-)	**MAXIMUM WORKING VOLTAGE (U_{out}) IN ANY LOAD CONDITION**		N/A

14	**TABLE: tests of fault conditions**	**P**
Part	Simulated fault	Hazard
CE1	Nothing impairing safety	NO
C3	Nothing impairing safety	NO
C4	Nothing impairing safety	NO
C5	Nothing impairing safety	NO
Q5(1-2)	Nothing impairing safety	NO
Q5(1-3)	Nothing impairing safety	NO
Q5(2-3)	Nothing impairing safety	NO
Q7(1-2)	Nothing impairing safety	NO
Q7(1-3)	Nothing impairing safety	NO
Q7(2-3)	Nothing impairing safety	NO
Q4(1-2)	Nothing impairing safety	NO
Q4(1-3)	Nothing impairing safety	NO
Q4(2-3)	Nothing impairing safety	NO
Q6(1-2)	Nothing impairing safety	NO
Q6(1-3)	Nothing impairing safety	NO
Q6(2-3)	Nothing impairing safety	NO
C10	Nothing impairing safety	NO
C11	Nothing impairing safety	NO
C12	Nothing impairing safety	NO
C16	Nothing impairing safety	NO
C18	Nothing impairing safety	NO

IEC/EN 61347-2-13			
Clause	Requirement + Test	Result - Remark	Verdict

C19	Nothing impairing safety	NO
C7	Nothing impairing safety	NO
Q1(1-2)	Nothing impairing safety	NO
Q1(1-3)	Nothing impairing safety	NO
Q1(2-3)	Nothing impairing safety	NO
D1	Nothing impairing safety	NO
C23	Nothing impairing safety	NO
C24	Nothing impairing safety	NO
C25	Nothing impairing safety	NO
C26	Nothing impairing safety	NO
C29	Nothing impairing safety	NO
C31	Nothing impairing safety	NO
C32	Nothing impairing safety	NO
C20	Nothing impairing safety	NO
C21	Nothing impairing safety	NO
C22	Nothing impairing safety	NO
Q2(1-2)	Nothing impairing safety	NO
Q2(1-3)	Nothing impairing safety	NO
Q2(2-3)	Nothing impairing safety	NO
D2	Nothing impairing safety	NO

17 (16)	**TABLE: clearance and creepage distance measurements (mm)**						**N/A**
Applicable part of IEC 61347-1 Table 7 – 11*							
Distances	**Insulation type ****	**Measured clearance**	**Required**		**Measured creepage**	**Required**	
			clearance	***Table**		**creepage**	***Table**
Distance 1:							
Working voltage (V) .....:					240		-
Frequency if applicable (kHz) .....:					-		-
PTI .....:					< 600 ☒ ≥ 600 ☐		-
Peak value of the working voltage $\hat{U}_{out}$ if applicable (kV) .....:					-		-
Pulse voltage if applicable (kV) .....:					-		-
Supplementary information: Between L and N, Between live parts and fuse pins, which the most unfavourable result has been record.							
Distance 2:	-	-	-	-	-	-	-
Working voltage (V) .....:					-		-
Frequency if applicable (kHz) .....:					-		-
PTI .....:					< 600 ☐ ≥ 600 ☐		-
Peak value of the working voltage $\hat{U}_{out}$ if applicable (kV) .....:					-		-
Pulse voltage 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) .....:					-		-
Pulse voltage if applicable (kV) .....:					-		-
Supplementary information: N/A							

** Insulation type: B – Basic; S – Supplementary; R – Reinforced

IEC/EN 61347-2-13			
Clause	Requirement + Test	Result - Remark	Verdict
(A)	**ANNEX A - TEST TO ESTABLISH WHETHER A CONDUCTIVE PART IS A LIVE PART WHICH MAY CAUSE AN ELECTRIC SHOCK**		P
(C)	**ANNEX C – PARTICULAR REQUIREMENTS FOR ELECTRONIC LAMP CONTROLGEAR WITH MEANS OF PROTECTION AGAINST OVERHEATING**		N/A
(D)	**ANNEX D – REQUIREMENTS FOR CARRY OUT THE HEATING TESTS OF THERMALLY PROTECTED LAMP CONTROLGEAR**		N/A
(F)	**ANNEX F – DRAUGHT-PROOF ENCOSURE**		N/A
(H)	**ANNEX H - TESTS**		P
I (L)	**ANNEX I IN THIS PART 2 – PARTICULAR ADDITIONAL REQUIREMENTS FOR SELV D.C. OR A.C. SUPPLIED ELECTRONIC CONTROLGEARS FOR LED MODULES**		N/A
J (-)	**ANNEX J IN THIS PART 2 – PARTICULAR ADDITIONAL SAFETY REQUIREMENTS FOR A.C., A.C./D.C. OR D.C. SUPPLIED ELECTRONIC CONTROLGEAR FOR EMERGENCY LIGHTING**		N/A
(N)	**ANNEX N: REQUIREMENTS FOR INSULATION MATERIALS USED FOR DOUBLE OR REINFORCED INSULATION**		N/A
(O)	**ANNEX O: ADDITIONAL REQUIREMENTS FOR BUILT-IN ELECTRONIC CONTROLGEAR WITH DOUBLE OR REINFORCED INSULATION**		N/A
(P)	**Creepage distances and clearances and distance through isolation (DTI) for lamp controlgear which are protected against pollution by the use of coating or potting**		N/A

IEC/EN 61347-2-11			
Clause	Requirement + Test	Result - Remark	Verdict
4 (4)	**GENERAL REQUIREMENTS**		**N/A**
6 (6)	**CLASSIFICATION**		**P**
	Built-in controlgear :	Yes ☐ No ☒	-
	Independent controlgear :	Yes ☐ No ☒	-
	Integral controlgear :	Yes ☒ No ☐	-
7 (7)	**MARKING**		P
8 (10)	**PROTECTION AGAINST ACCIDENTAL CONTACT WITH LIVE PARTS**		N/A
9 (8)	**TERMINALS**		N/A
10 (9)	**PROVISION FOR PROTECTIVE EARTHING**		N/A
11 (11)	**MOISTURE RESISTANCE AND INSULATION**		P
12 (12)	**ELECTRIC STRENGTH**		**P**
14 (14)	**FAULT CONDITIONS**		**P**
- (14.1)	When operated under fault conditions the controlgear:		P
	- does not emit flames or molten material		P
	- does not produce flammable gases		
	- protection against accidental contact not impaired		P
	Thermally protected controlgear does not exceed the marked temperature value		N/A
	Fault conditions: capacitors, resistors or inductors without proof of compliance with relevant specifications have been short-circuited or disconnected	(see appended table)	P
- (14.2)	Short-circuit of creepage distances and clearances if less than specified in clause 16 in Part 1 (after any reduction in 14.2 - 14.5)	(see appended table)	P
- (14.3)	Short-circuit or interruption of semiconductor devices	(see appended table)	P
- (14.4)	Short-circuit across insulation consisting of lacquer, enamel or textile	(see appended table)	P
- (14.5)	Short-circuit across electrolytic capacitors	(see appended table)	P
	Short-circuit or interruption of SPDs	(see appended table)	P
14 (-)	Reversed voltage polarity if d.c. supplied control gear	(see appended table)	P
- (14.6)	After the tests has been carried out on three samples:		P
	The insulation resistance 1 M :		P
	No flammable gases		P
	No accessible parts have become live		P
	During the tests, a five-layer tissue paper, where the test specimen is wrapped, does not ignite		P
- (14.7)	Relevant fault condition tests with high-power a.c. supply and in turn to a d.c. supply		--
14 (-)	Temperature declared thermally protected lamp controlgear fulfil requirements in Annex C		N/A

IEC/EN 61347-2-11			
Clause	Requirement + Test	Result - Remark	Verdict

15 (15)	**CONSTRUCTION**	P

16 (16)	**CREEPAGE DISTANCES AND CLEARANCES**	N/A

17 (17)	**SCREWS, CURRENT-CARRYING PARTS AND CONNECTIONS**	P

18 (18)	**RESISTANCE TO HEAT, FIRE AND TRACKING**	P

19 (19)	**RESISTANCE TO CORROSION**	N/A

20 (-)	***ANNEXES***		**P**
	Comply with appropriate annexes of IEC 61347-1	(see Annexes)	P

14	**TABLE: tests of fault conditions**	**P**
Part	Simulated fault	Hazard
C1	Nothing impairing safety	NO
C3	Nothing impairing safety	NO
C6	Nothing impairing safety	NO
C8	Nothing impairing safety	NO
C10	Nothing impairing safety	NO
C11	Nothing impairing safety	NO
C12	Nothing impairing safety	NO
C16	Nothing impairing safety	NO
C17	Nothing impairing safety	NO
C15	Nothing impairing safety	NO
C19	Nothing impairing safety	NO
C21	Nothing impairing safety	NO
C13	Nothing impairing safety	NO
C28	Nothing impairing safety	NO
C30	Nothing impairing safety	NO
C32	Nothing impairing safety	NO
C33	Nothing impairing safety	NO
C35	Nothing impairing safety	NO
C36	Nothing impairing safety	NO
C37	Nothing impairing safety	NO
C38	Nothing impairing safety	NO
C39	Nothing impairing safety	NO
C41	Nothing impairing safety	NO
C45	Nothing impairing safety	NO
C46	Nothing impairing safety	NO
C47	Nothing impairing safety	NO
C54	Nothing impairing safety	NO
D1	Nothing impairing safety	NO
D3	Nothing impairing safety	NO
D7	Nothing impairing safety	NO
D5	Nothing impairing safety	NO

17 (16)	**TABLE: clearance and creepage distance measurements (mm)**	**N/A**

IEC/EN 61347-2-11			
Clause	Requirement + Test	Result - Remark	Verdict

Applicable part of IEC 61347-1 Table 7 – 11*								
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) :					-			-
Pulse voltage 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) :					-			-
Pulse voltage 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) :					-			-
Pulse voltage if applicable (kV) :					-			-
Supplementary information: N/A								

** Insulation type: B – Basic; S – Supplementary; R – Reinforced

(A)	**ANNEX A - TEST TO ESTABLISH WHETHER A CONDUCTIVE PART IS A LIVE PART WHICH MAY CAUSE AN ELECTRIC SHOCK**	P
(C)	**ANNEX C – PARTICULAR REQUIREMENTS FOR ELECTRONIC LAMP CONTROLGEAR WITH MEANS OF PROTECTION AGAINST OVERHEATING**	N/A
(D)	**ANNEX D – REQUIREMENTS FOR CARRY OUT THE HEATING TESTS OF THERMALLY PROTECTED LAMP CONTROLGEAR**	N/A
(F)	**ANNEX F – DRAUGHT-PROOF ENCOSURE**	N/A
(H)	**ANNEX H - TESTS**	P
I (L)	**ANNEX I IN THIS PART 2 – PARTICULAR ADDITIONAL REQUIREMENTS FOR SELV D.C. OR A.C. SUPPLIED ELECTRONIC CONTROLGEARS FOR LED MODULES**	N/A
J (-)	**ANNEX J IN THIS PART 2 – PARTICULAR ADDITIONAL SAFETY REQUIREMENTS FOR A.C., A.C./D.C. OR D.C. SUPPLIED ELECTRONIC CONTROLGEAR FOR EMERGENCY LIGHTING**	N/A
(N)	**ANNEX N: REQUIREMENTS FOR INSULATION MATERIALS USED FOR DOUBLE OR REINFORCED INSULATION**	N/A

IEC/EN 61347-2-11			
Clause	Requirement + Test	Result - Remark	Verdict
(O)	**ANNEX O: ADDITIONAL REQUIREMENTS FOR BUILT-IN ELECTRONIC CONTROLGEAR WITH DOUBLE OR REINFORCED INSULATION**		N/A
(P)	**Creepage distances and clearances and distance through isolation (DTI) for lamp controlgear which are protected against pollution by the use of coating or potting**		N/A

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

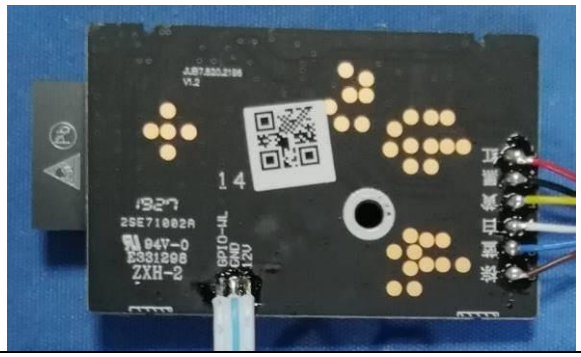
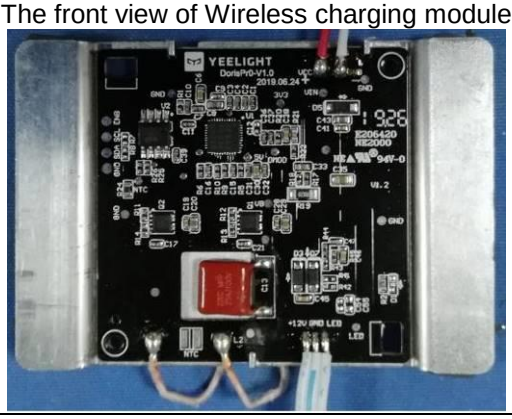
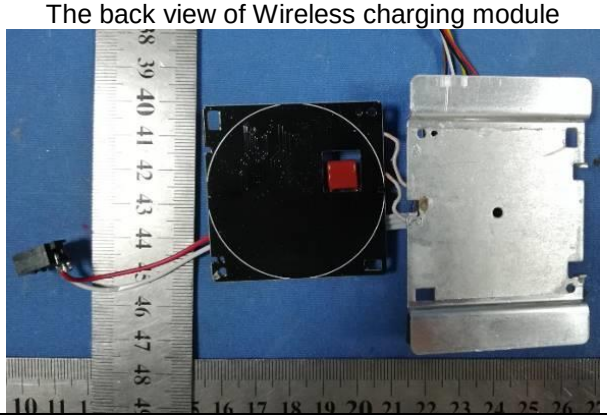
CLAUSE	TITLE	REMARK	NOTE	PASS	FAIL	N.A	N.D
4	GENERAL REQUIREMENTS			X			
5	ELECTRICALLY-CAUSED INJURY			X			
6	ELECTRICALLY- CAUSED FIRE			X			
7	INJURY CAUSED BY HAZARDOUS SUBSTANCES					X	
8	MECHANICALLY-CAUSED INJURY			X			
9	THERMAL BURN INJURY			X			
10	RADIATION					X	

B	NORMAL OPERATING CONDITION TESTS, ABNORMAL OPERATING CONDITION TESTS AND SINGLE FAULT CONDITION TESTS			X			
C	UV RADIATION					X	
D	TEST GENERATORS					X	
E	TEST CONDITIONS FOR EQUIPMENT CONTAINING AUDIO AMPLIFIERS					X	
F	EQUIPMENT MARKINGS, INSTRUCTIONS, AND INSTRUCTIONAL SAFEGUARDS			X			
G	COMPONENTS			X			
H	CRITERIA FOR TELEPHONE RINGING SIGNALS					X	
J	INSULATED WINDING WIRES FOR USE WITHOUT INTERLEAVED INSULATION					X	
K	SAFETY INTERLOCKS					X	
L	DISCONNECT DEVICES					X	
M	EQUIPMENT CONTAINING BATTERIES AND THEIR PROTECTION CIRCUITS					X	
N	ELECTROCHEMICAL POTENTIALS					X	

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

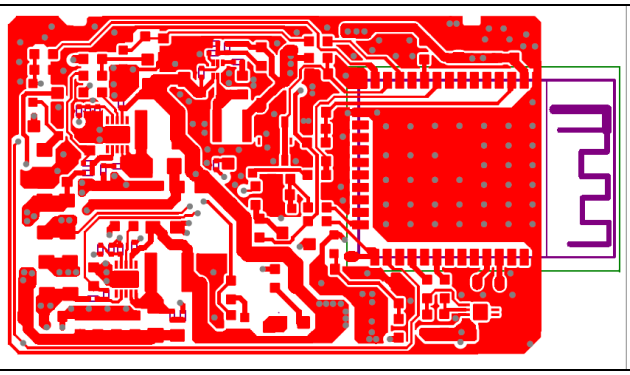
O	MEASUREMENT OF CREEPAGE DISTANCES AND CLEARANCES					X	
P	SAFEGUARDS AGAINST ENTRY OF FOREIGN OBJECTS AND SPILLAGE OF INTERNAL LIQUIDS					X	
Q	CIRCUITS INTENDED FOR INTERCONNECTION WITH BUILDING WIRING					X	
R	LIMITED SHORT CIRCUIT TEST					X	
S	TESTS FOR RESISTANCE TO HEAT AND FIRE					X	
T	MECHANICAL STRENGTH TESTS					X	
U	MECHANICAL STRENGTH OF CATHODE RAY TUBES (CRT) AND PROTECTION AGAINST THE EFECTS OF IMPLOSION					X	
V	DETERMINATION OF ACCESSIBLE PARTS (FINGERS, PROBES AND WEDGES)					X	

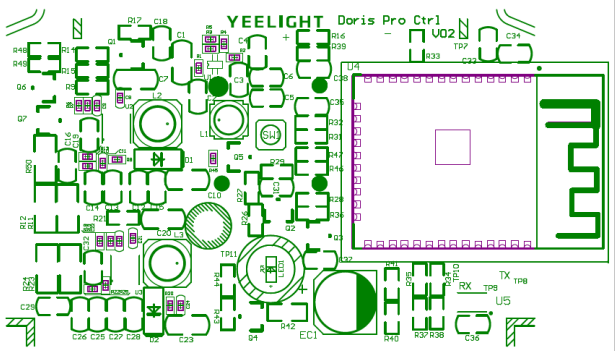
PCB layout and circuit diagram

The front view of PCB module	The back view of PCB module
	
The front view of Wireless charging module	**The back view of Wireless charging module**
	

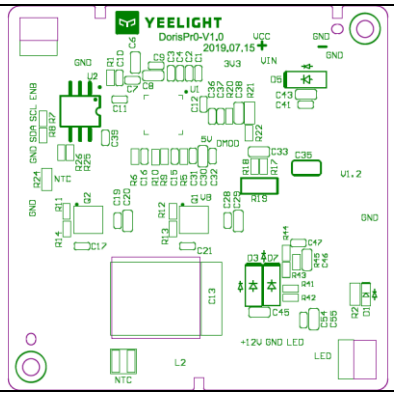
PCB layout:

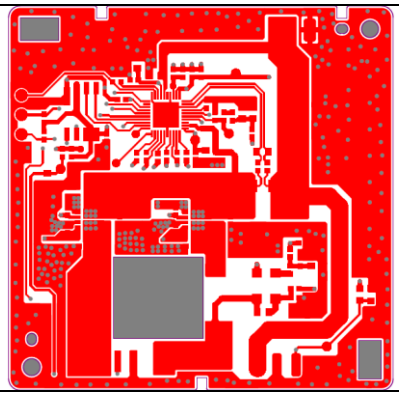
PCB module





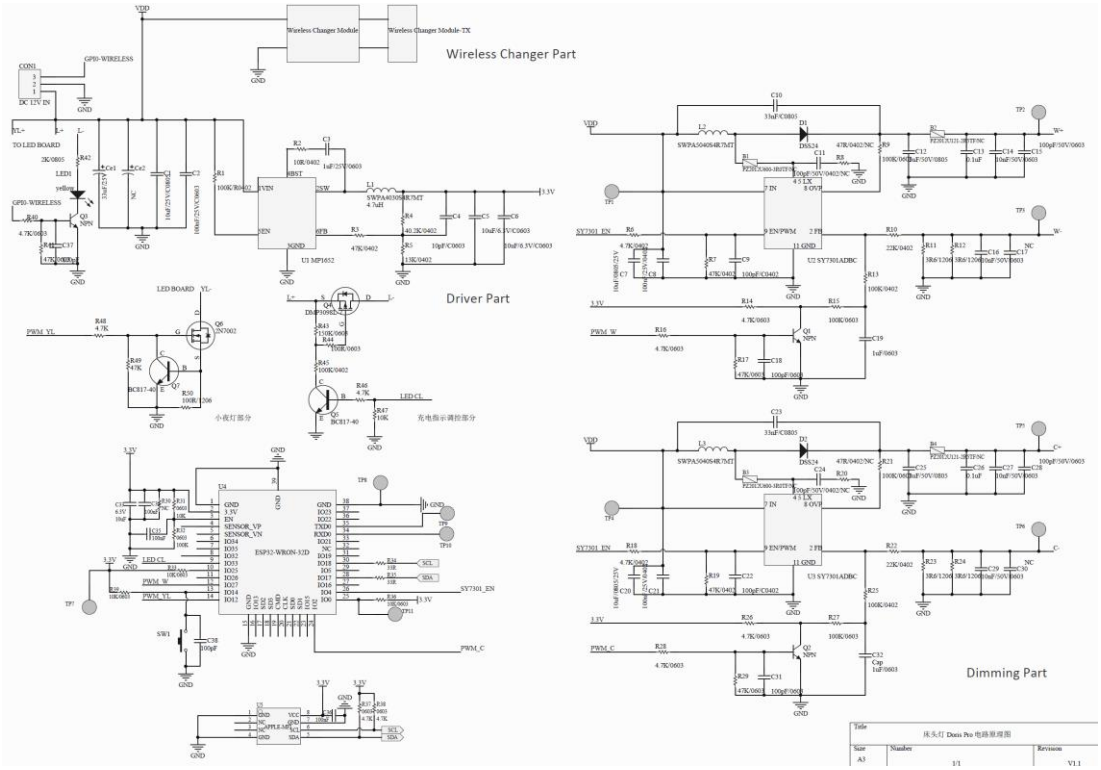
Wireless charging module



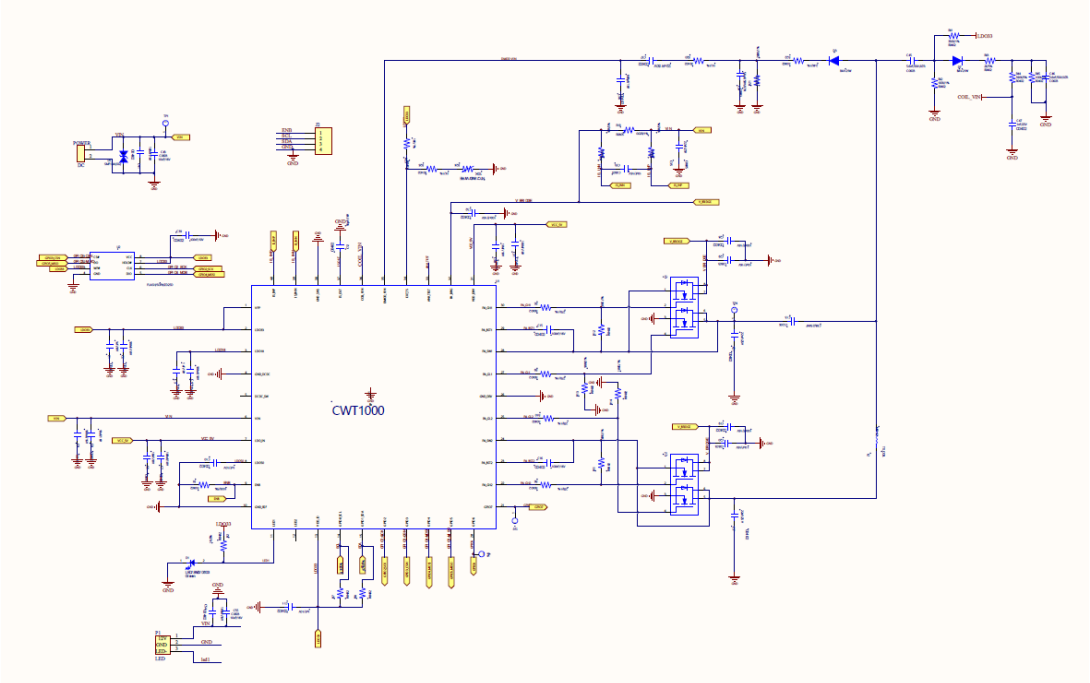


PCB layout and circuit diagram

Circuit diagram



Wireless charging module



Pictures of test sample

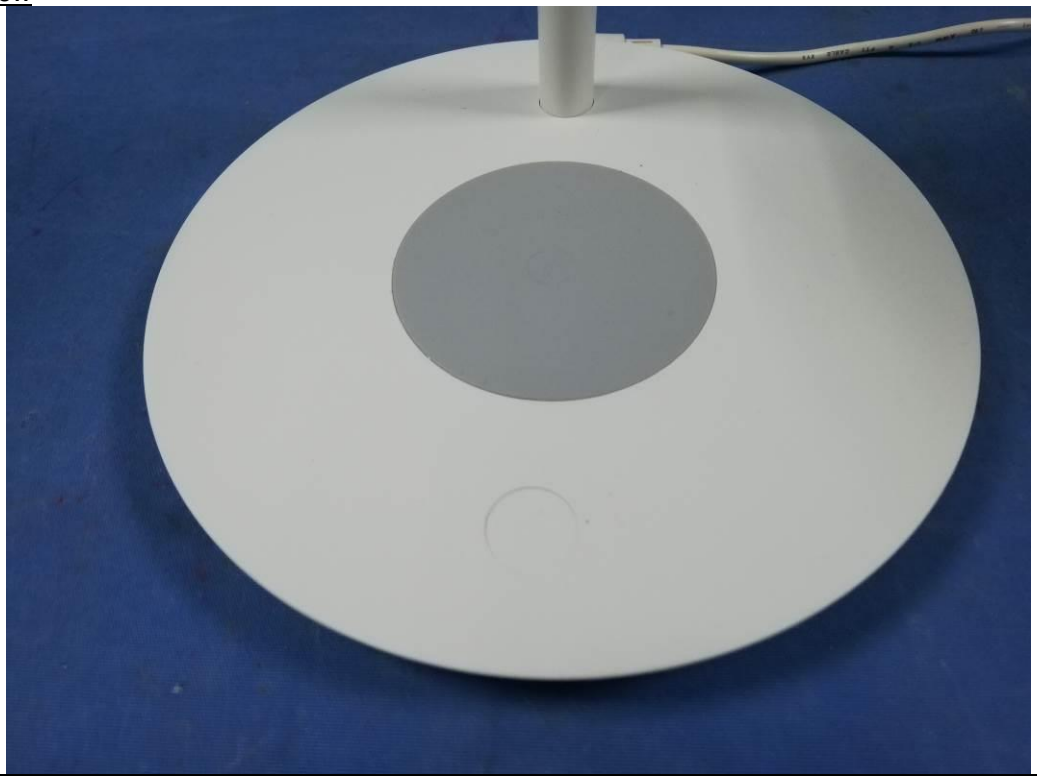
Overview (Class III luminaire with certificated LED driver)

DC connector view

Pictures of test sample

Overview of luminaire

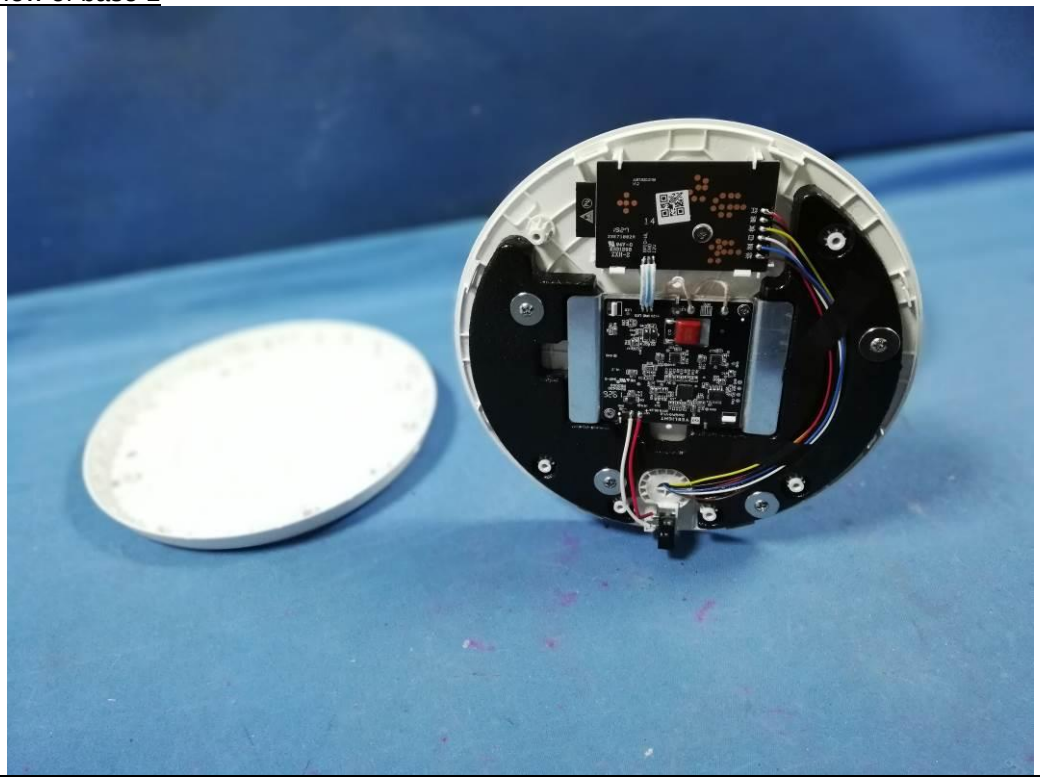
Switch view



Pictures of test sample

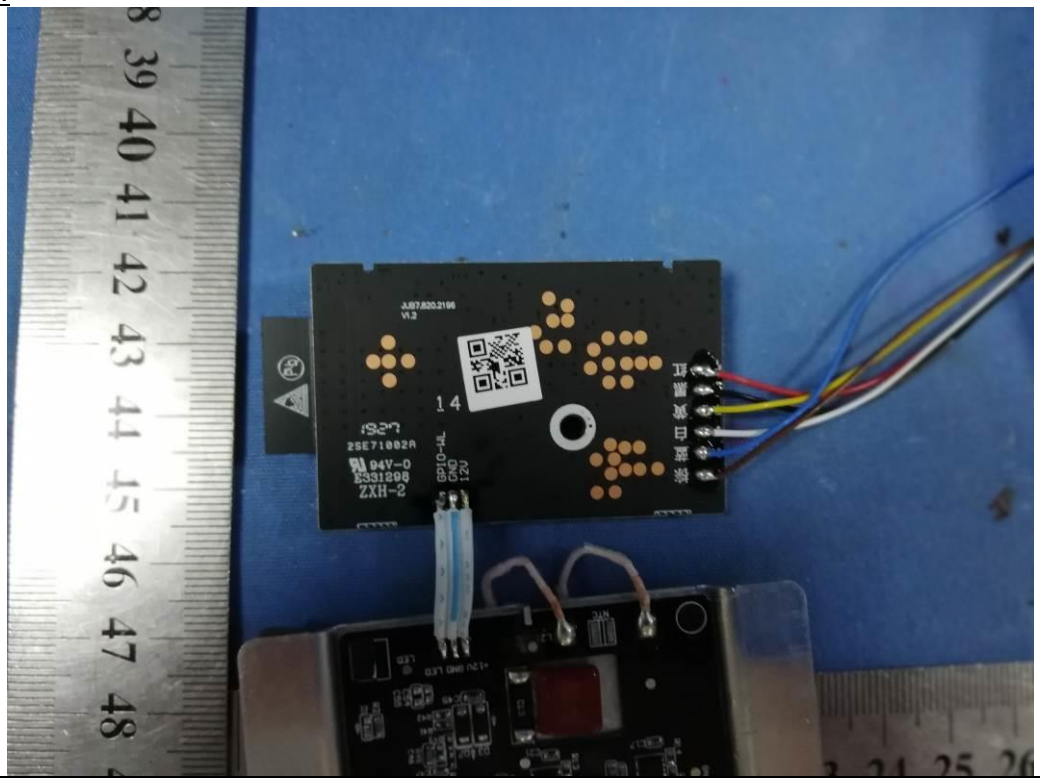
Base view

Internal view of base 1

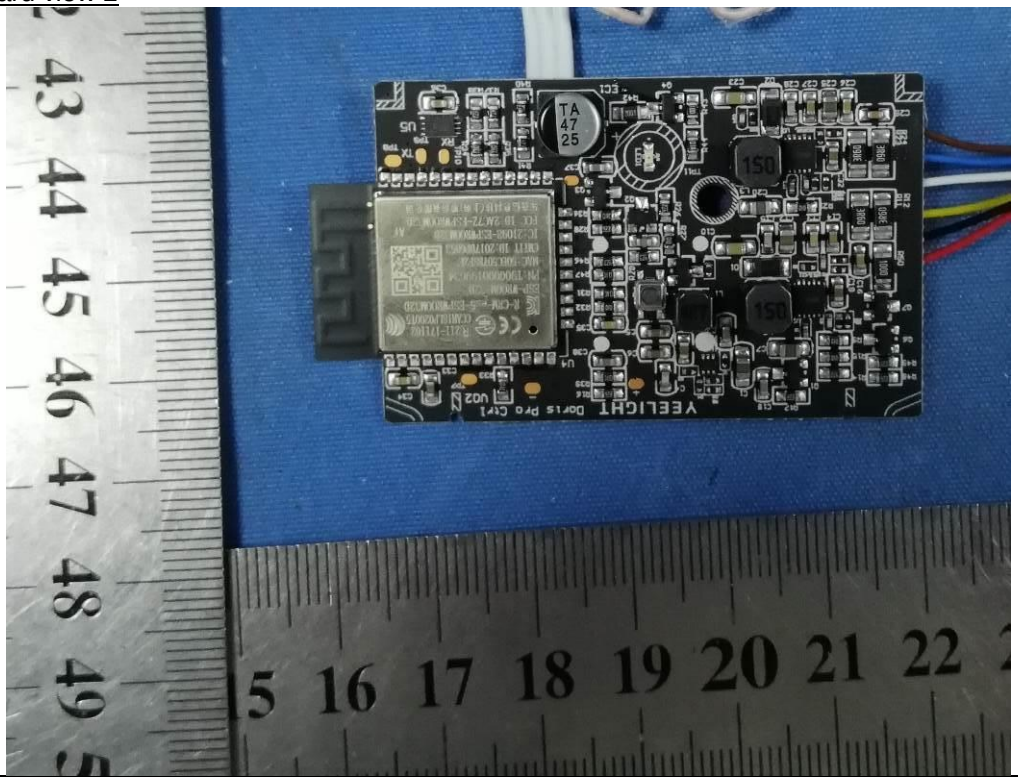


Pictures of test sample

PCB view

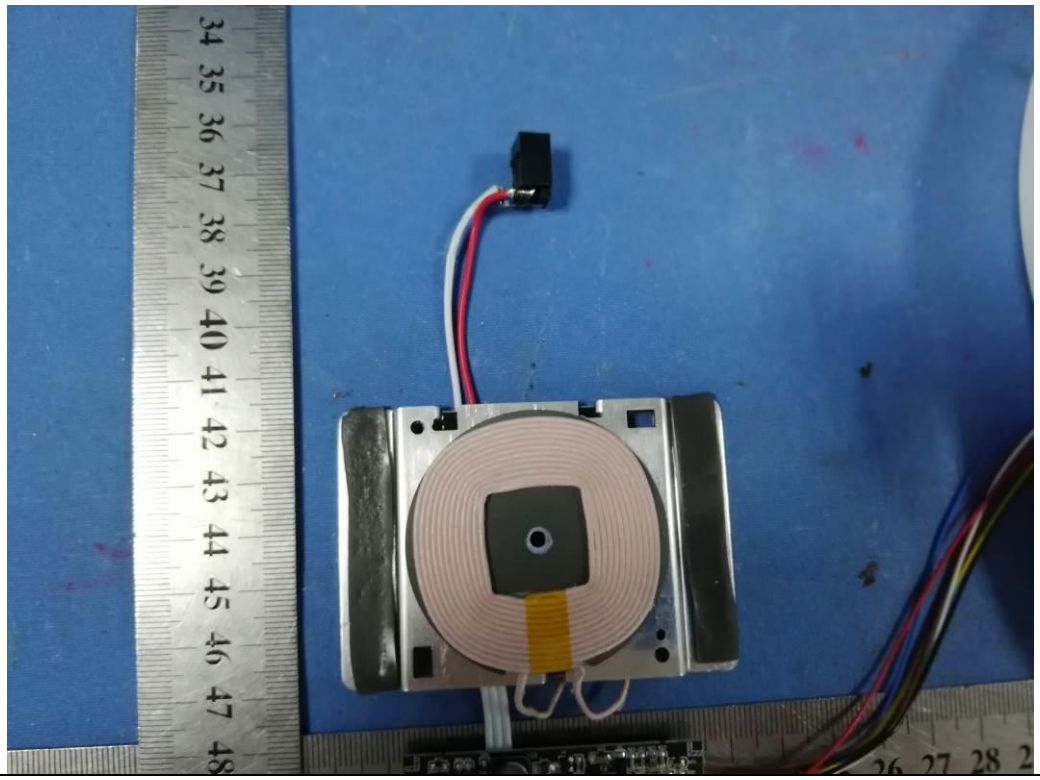


Switch board view 2

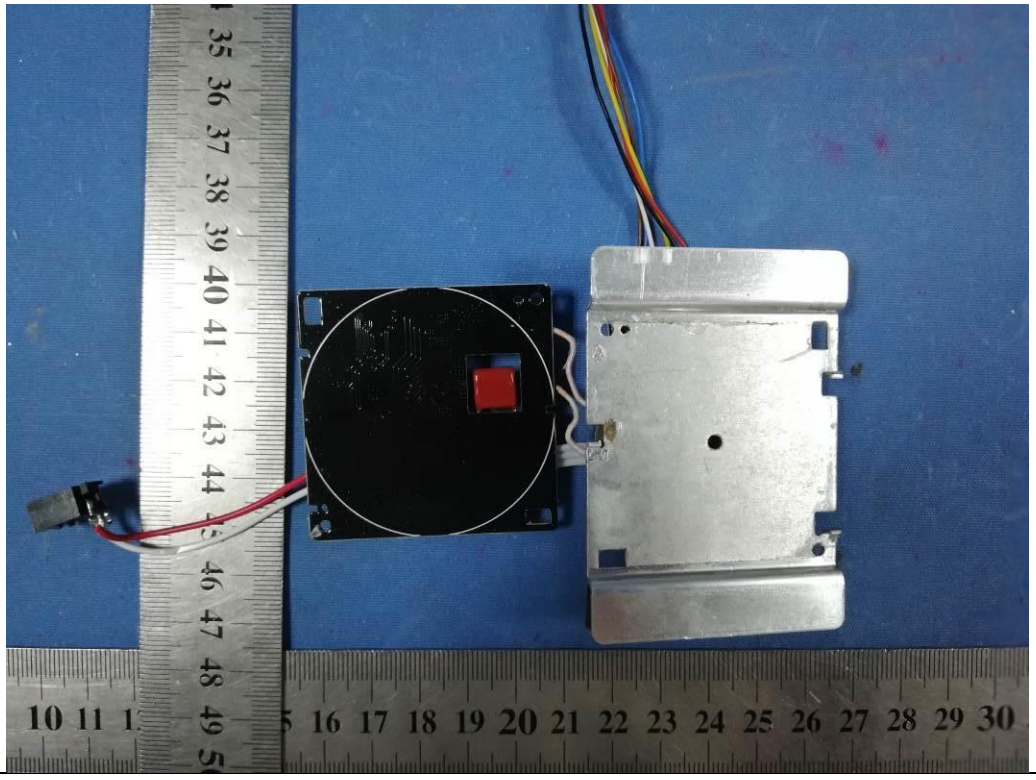


Pictures of test sample

PCB 2-1

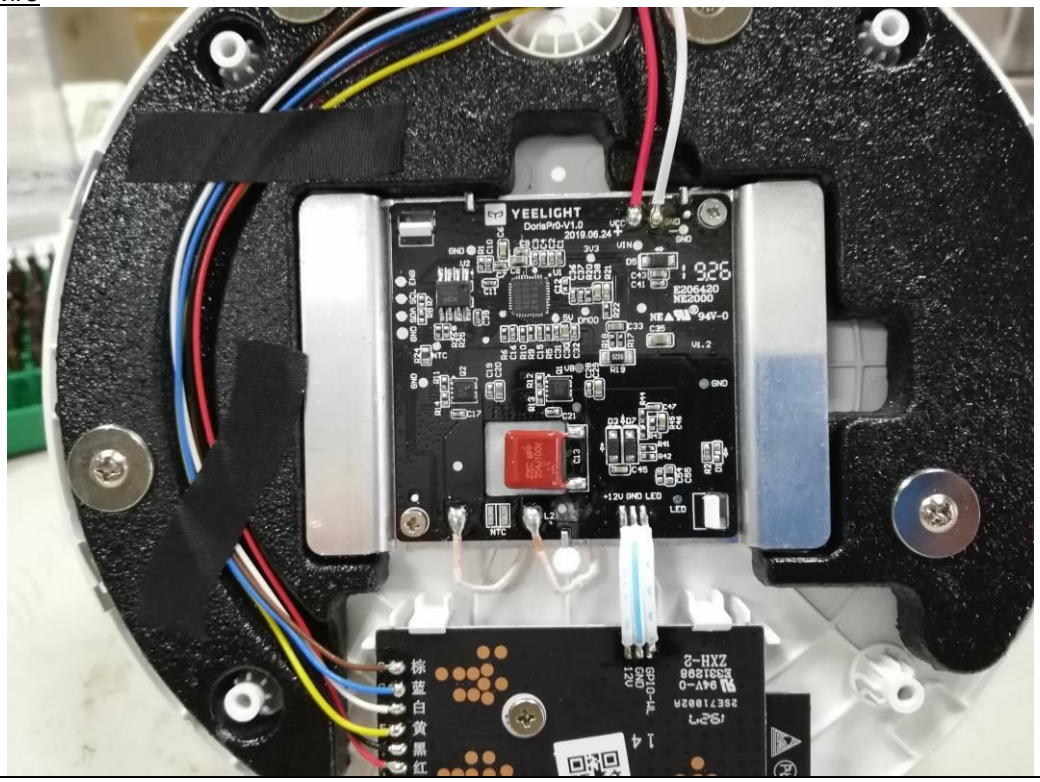


PCB 2-2



Pictures of test sample

Internal wire



Internal view for adjustable device 1

Pictures of test sample

Internal view for adjustable device 2 and internal wire view of lampshade

LED module view

Pictures of test sample

LED driver(ASLP26W-120150)

==END==