TEST REPORT
IEC 60598-2-2
Luminaires
Part 2: Particular requirements
Section 2: Recessed luminaires

Report Number. ..... :	704021846201-00
Date of issue ..... :	2018-05-14
Total number of pages ..... :	65
Name of Testing Laboratory preparing the Report ..... :	TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
Applicant's name ..... :	SHANGHAI HAIFENG ELECTRICAL CO., LED
Address ..... :	No.33 LIUDA RD, LIUZHAO TOWN, PUDONG NEW AREA, SHANGHAI, CHINA
Test specification:	
Standard ..... :	IEC 60598-2-2:2011 (Third Edition) used in conjunction with IEC 60598-1:2014 (Eighth Edition)
Test procedure ..... :	EU-Directive
Non-standard test method ..... :	N/A
Test Report Form No. ..... :	IEC60598_2_2D
Test Report Form(s) Originator.... :	Intertek Semko AB
Master TRF ..... :	2014-09

This report is not valid as a CB Test Report unless signed by an approved CB 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.
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Test item description..... :	LED recessed luminaries
Trade Mark..... :	Haifeng Lighting
Manufacturer..... :	SHANGHAI HAIFENG ELECTRICAL CO., LED
Model/Type reference..... :	SL82 5W; SL82-LD-3S 5W; SL82-SD 5W; SL82 7W; SL82-LD-3S 7W; SL82-SD 7W.
Ratings..... :	220-240V~; 50/60Hz; Class II; IP20; SL82 5W, SL82-LD-3S 5W, SL82-SD 5W: 5W; SL82 7W, SL82-LD-3S 7W, SL82-SD 7W: 7W.

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

☒	**CB Testing Laboratory:**	TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch No.151 Heng Tong Road. Shanghai 200070 P.R. China	
Testing location/ address.....:		No. 1999, Duhui Road, Shanghai, 201108, P. R. China	
☐	**Associated CB Testing Laboratory:**		
Testing location/ address.....:		N/A	
Tested by (name, function, signature).....:		Xudong ZANG	
Approved by (name, function, signature)...:		Huidong ZHANG	
☐	**Testing procedure: TMP/CTF Stage 1:**	N/A	
Testing location/ address.....:		N/A	
Tested by (name, function, signature).....:		N/A	
Approved by (name, function, signature)...:		N/A	
☐	**Testing procedure: WMT/CTF Stage 2:**	N/A	
Testing location/ address.....:		N/A	
Tested by (name + signature) .....:		N/A	
Witnessed by (name, function, signature)..:		N/A	
Approved by (name, function, signature)...:		N/A	
☐	**Testing procedure: SMT/CTF Stage 3 or 4:**	N/A	
Testing location/ address.....:		N/A	
Tested by (name, function, signature).....:		N/A	
Witnessed by (name, function, signature)..:		N/A	
Approved by (name, function, signature)...:		N/A	
Supervised by (name, function, signature) :		N/A	

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

N/A

Summary of testing:

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

Representative sample covered by this report has been tested and complies with the applicable requirements of this standard.
All applicable hazards are covered by the harmonized standard.

Tests performed (name of test and test clause):	**Testing location:**
Complete tests on model SL82 7W; SL82-LD-3S 7W; SL82-SD 7W. EMF requirements of EN 62493:2015 deemed to comply with the Van der Hoofden test without testing. Please refer to test appendix 5.	TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch No. 1999, Duhui Road, Shanghai, 201108, P. R. China

Summary of compliance with National Differences:

List of countries addressed N/A

The deviation between EN 60598-2-2: 2012 used in conjunction with EN 60598-1:2015 and IEC 60598-2-2:2011 (Third Edition) used in conjunction with IEC 60598-1:2014 (Eighth Edition) is taken into account

☒ **The product fulfils the requirements of EN 60598-2-2:2012 used in conjunction with EN 60598-1:2015**

Copy of marking plate:

(See Construction Data form for electrical equipment and machinery)

Test item particulars .....:	LED recessed luminaires
Classification of installation and use.....:	Class II
Supply Connection .....:	Terminal block & connecting leads
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..... :	2018-02-25
Date (s) of performance of tests ..... :	2018-02-25 to 2018-05-03

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.

Remark:
The following contents are included and as appendix of this test report:

- Test report IEC 60598-2-2:2011 (Third Edition) used in conjunction with IEC 60598-1:2014 (Eighth Edition)
- Appendix 1: Comprising deviation of EN 60598-2-2:2012 used in conjunction with EN 60598-1:2015
- Appendix 2: Requirements of EN 62031:2008/A2:2015 for LED modules
- Appendix 3: Requirements of EN 62471:2008
- Appendix 4: Requirements of IEC/TR 62778:2014 for the assessment of blue light hazard to light sources and luminaires module
- Appendix 5: Requirements of EN 61347-2-13:2014 used in conjunction with EN 61347-1:2015 for LED drivers
- Appendix 6: Requirements of EN 62493:2015
- Appendix 7: Photographs
- Data form for electrical equipment and machinery

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)..... :	SHANGHAI HAIFENG ELECTRICAL CO., LED No.33 LIUDA RD, LIUZHAO TOWN, PUDONG NEW AREA, SHANGHAI, CHINA

General product information:

The products covered in this test report are recessed luminaires.
All models have similar construction, only different of the shade of lamp.
All models may be followed by white, black, golden, silver, bronze or nickel (colour of enclosure).

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

2.3 (0)	**GENERAL TEST REQUIREMENTS**		P
2.3 (0.1)	Information for luminaire design considered.....:	Yes ☒ No ☐	—
2.3 (0.3)	More sections applicable .....:	Yes ☐ No ☒	—

2.4 (2)	**CLASSIFICATION**		P
2.5 (2.2)	Type of protection .....:	Class II	—
2.5 (2.3)	Degree of protection.....:	IP20	—
2.5 (2.4)	Luminaire suitable for direct mounting on normally flammable surfaces .....:	Yes ☒ No ☐	—
2.5 (2.5)	Luminaire for normal use .....:	Yes ☒ No ☐	—
	Luminaire for rough service .....:	Yes ☐ No ☒	—

2.6 (3)	**MARKING**		P
2.6 (3.2)	Mandatory markings		P
	Position of the marking		P
	Format of symbols/text		P
2.6 (3.3)	Additional information		P
	Language of instructions		P
2.6 (3.3.1)	Combination luminaires		N/A
2.6 (3.3.2)	Nominal frequency in Hz		P
2.6 (3.3.3)	Operating temperature		N/A
2.6 (3.3.4)	Symbol or warning notice		N/A
2.6 (3.3.5)	Wiring diagram		N/A
2.6 (3.3.6)	Special conditions		N/A
2.6 (3.3.7)	Metal halide lamp luminaire – warning		N/A
2.6 (3.3.8)	Limitation for semi-luminaires		N/A
2.6 (3.3.9)	Power factor and supply current		N/A
2.6 (3.3.10)	Suitability for use indoors		P
2.6 (3.3.11)	Luminaires with remote control		N/A
2.6 (3.3.12)	Clip-mounted luminaire – warning		N/A
2.6 (3.3.13)	Specifications of protective shields		N/A
2.6 (3.3.14)	Symbol for nature of supply	~	P
2.6 (3.3.15)	Rated current of socket outlet		N/A
2.6 (3.3.16)	Rough service luminaire		N/A

IEC 60598-2-2			
Clause	Requirement + Test	Result - Remark	Verdict
2.6 (3.3.17)	Mounting instruction for type Y, type Z and some type X attachments	Y	P
2.6 (3.3.18)	Non-ordinary luminaires with PVC cable		N/A
2.6 (3.3.19)	Protective conductor current in instruction if applicable		N/A
2.6 (3.3.20)	Provided with information if not intended to be mounted within arm's reach		N/A
2.6 (3.3.21)	Non replaceable and non-user replaceable light sources information provided		P
	Cautionary symbol		N/A
2.6 (3.3.22)	Controllable luminaires, classification of insulation provided		N/A
2.6 (3.4)	Test with water		P
	Test with hexane		P
	Legible after test		P
	Label attached		P
2.7 (4)	**CONSTRUCTION**		**P**
2.7 (4.2)	Components replaceable without difficulty		N/A
2.7 (4.3)	Wireways smooth and free from sharp edges		P
2.7 (4.4)	**Lampholders**		**N/A**
2.7 (4.4.1)	Integral lampholder		N/A
2.7 (4.4.2)	Wiring connection		N/A
2.7 (4.4.3)	Lampholder for end-to-end mounting		N/A
2.7 (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 have not moved from its position and show no permanent deformation		N/A
2.7 (4.4.5)	Peak pulse voltage		N/A
2.7 (4.4.6)	Centre contact		N/A
2.7 (4.4.7)	Parts in rough service luminaires resistant to tracking		N/A
2.7 (4.4.8)	Lamp connectors		N/A

IEC 60598-2-2			
Clause	Requirement + Test	Result - Remark	Verdict
2.7 (4.4.9)	Caps and bases correctly used		N/A
2.7 (4.4.10)	Light source for lampholder or connection according IEC 60061 not connected another way		N/A
2.7 (4.5)	**Starter holders**		**N/A**
	Starter holder in luminaires other than class II		N/A
	Starter holder class II construction		N/A
2.7 (4.6)	**Terminal blocks**		**N/A**
	Tails		N/A
	Unsecured blocks		N/A
2.7 (4.7)	**Terminals and supply connections**		**P**
2.7 (4.7.1)	Contact to metal parts		N/A
2.7 (4.7.2)	Test 8 mm live conductor		P
	Test 8 mm earth conductor		N/A
2.7 (4.7.3)	Terminals for supply conductors		P
2.7 (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 15.8.2		N/A
	- electrical test according to 15.9		N/A
	- heat test according to 15.9.2.3 and 15.9.2.4		N/A
2.7 (4.7.4)	Terminals other than supply connection		N/A
2.7 (4.7.5)	Heat-resistant wiring/sleeves		N/A
2.7 (4.7.6)	Multi-pole plug		N/A
	- test at 30 N		N/A
2.7 (4.8)	**Switches**		N/A
	- adequate rating		N/A
	- adequate fixing		N/A
	- polarized supply		N/A
	- compliance with IEC 61058-1 for electronic switches		N/A
2.7 (4.9)	**Insulating lining and sleeves**		**N/A**
2.7 (4.9.1)	Retainment		N/A
	Method of fixing.....:		—

IEC 60598-2-2			
Clause	Requirement + Test	Result - Remark	Verdict
2.7 (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
2.7 (4.10)	**Double or reinforced insulation**		**P**
2.7 (4.10.1)	No contact, mounting surface – accessible metal parts – wiring of basic insulation		P
	Safe installation fixed luminaires		P
	Capacitors and switches		N/A
	Interference suppression capacitors according to IEC 60384-14		N/A
2.7 (4.10.2)	Assembly gaps:		P
	- not coincidental		P
	- no straight access with test probe		P
2.7 (4.10.3)	Retainment of insulation:		P
	- fixed		P
	- unable to be replaced; luminaire inoperative		P
	- sleeves retained in position		N/A
	- lining in lampholder		N/A
2.7 (4.11)	**Electrical connections and current-carrying parts**		**P**
2.7 (4.11.1)	Contact pressure		P
2.7 (4.11.2)	Screws:		N/A
	- self-tapping screws		N/A
	- thread-cutting screws		N/A
2.7 (4.11.3)	Screw locking:		N/A
	- spring washer		N/A
	- rivets		N/A
2.7 (4.11.4)	Material of current-carrying parts		P
2.7 (4.11.5)	No contact to wood or mounting surface		P
2.7 (4.11.6)	Electro-mechanical contact systems		N/A
2.7 (4.12)	**Screws and connections (mechanical) and glands**		P
2.7 (4.12.1)	Screws not made of soft metal		P
	Screws of insulating material		N/A
	Torque test: torque (Nm); part.....:	Terminal box: 0,5Nm	P
	Torque test: torque (Nm); part.....:	Cord anchorage: 0,5Nm	P

IEC 60598-2-2			
Clause	Requirement + Test	Result - Remark	Verdict
	Torque test: torque (Nm); part.....:	LED PCB: 0,5Nm	P
2.7 (4.12.2)	Screws with diameter < 3 mm screwed into metal		N/A
2.7 (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
2.7 (4.12.5)	Screwed glands; force (Nm).....:		N/A
2.7 (4.13)	**Mechanical strength**		**P**
2.7 (4.13.1)	Impact tests:		P
	- fragile parts; energy (Nm).....:		N/A
	- other parts; energy (Nm).....:	0,35Nm	P
	1) live parts		P
	2) linings		N/A
	3) protection		P
	4) covers		P
2.7 (4.13.3)	Straight test finger		P
2.7 (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
2.7 (4.13.6)	Tumbling barrel		N/A
2.7 (4.14)	**Suspensions, fixings and means of adjusting**		**P**
2.7 (4.14.1)	Mechanical load:		P
	A) four times the weight		P
	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
2.7 (4.14.2)	Load to flexible cables		N/A

IEC 60598-2-2			
Clause	Requirement + Test	Result - Remark	Verdict
	Mass (kg) .....:		—
	Stress in conductors (N/mm²) .....:		N/A
	Mass (kg) of semi-luminaire .....:		—
	Bending moment (Nm) of semi-luminaire .....:		N/A
2.7 (4.14.3)	Adjusting devices:		N/A
	- flexing test; number of cycles.....:		N/A
	- strands broken .....:		N/A
	- electric strength test afterwards		N/A
2.7 (4.14.4)	Telescopic tubes: cords not fixed to tube; no strain on conductors		N/A
2.7 (4.14.5)	Guide pulleys		N/A
2.7 (4.14.6)	Strain on socket-outlets		N/A
2.7 (4.15)	**Flammable materials**		**P**
	- glow-wire test 650°C.....:	See Test Table 2.16 (13.3.2)	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
2.7 (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
2.7 (4.16)	**Luminaires for mounting on normally flammable surfaces**		**P**
	No lamp control gear .....:	(compliance with Section 12)	P
2.7 (4.16.1)	Lamp control gear spacing:		N/A
	- spacing 35 mm		N/A
	- spacing 10 mm		N/A
2.7 (4.16.2)	Thermal protection:		N/A
	- in lamp control gear		N/A
	- external		N/A
	- fixed position		N/A
	- temperature marked lamp control gear		N/A
2.7 (4.16.3)	Design to satisfy the test of 12.6	(see clause 12.6)	N/A

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

2.7 (4.17)	**Drain holes**		N/A
	Clearance at least 5 mm		N/A
2.7 (4.18)	**Resistance to corrosion**		N/A
2.7 (4.18.1)	- rust-resistance		N/A
2.7 (4.18.2)	- season cracking in copper		N/A
2.7 (4.18.3)	- corrosion of aluminium		N/A
2.7 (4.19)	Igniters compatible with ballast		N/A
2.7 (4.20)	Rough service vibration		N/A
2.7 (4.21)	**Protective shield**		**N/A**
2.7 (4.21.1)	Shield fitted if tungsten halogen lamps or metal halide lamps		N/A
	Shield of glass if tungsten halogen lamps		N/A
2.7 (4.21.2)	Particles from a shattering lamp not impair safety		N/A
2.7 (4.21.3)	No direct path		N/A
2.7 (4.21.4)	Impact test on shield		N/A
	Glow-wire test on lamp compartment.....:	See Test Table 2.16 (13.3.2)	N/A
2.7 (4.22)	Attachments to lamps not cause overheating or damage		N/A
2.7 (4.23)	Semi-luminaires comply Class II		N/A
2.7 (4.24)	**Photobiological hazards**		**P**
2.7 (4.24.1)	No excessive UV radiation if tungsten halogen lamps and metal halide lamps (Annex P)		N/A
2.7 (4.24.2)	Retinal blue light hazard	Classified as RG0	P
	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
	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
2.7 (4.25)	**Mechanical hazard**		**P**
	No sharp point or edges		P
2.7 **(4.26)**	**Short-circuit protection**		**N/A**

IEC 60598-2-2			
Clause	Requirement + Test	Result - Remark	Verdict
2.7 (4.26.1)	Adequate means of uninsulated accessible SELV parts		N/A
2.7 (4.26.2)	Short-circuit test with test chain according 4.26.3		N/A
	Test chain not melt through		N/A
	Test sample not exceed values of Table 12.1 and 12.2		N/A
2.7 (4.27)	**Terminal blocks with integrated screwless 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
2.7 (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
2.7 (4.29)	**Luminaires with non-replaceable light source**		**P**
	Not possible to replace light source		P
	Live part not accessible after parts have been opened by hand or tools		N/A
2.7 (4.30)	**Luminaires with non-user replaceable light source**		N/A
	If protective cover provide protection against electric shock and marked with “caution, electric shock risk” symbol:		N/A
	Minimum two fixing means		N/A
2.7 (4.31)	**Insulation between circuits**		P
	Circuits insulated from LV supply fulfil requirements according 4.31.1 – 4.31.3		P
	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

IEC 60598-2-2			
Clause	Requirement + Test	Result - Remark	Verdict
2.7 (4.31.1)	SELV circuits		N/A
	Used SELV source		N/A
	Voltage ≤ ELV		N/A
	Insulating of SELV circuits from LV supply		N/A
	Insulating of SELV circuits from other non SELV circuits		N/A
	Insulating of SELV circuits from FELV		N/A
	Insulating of SELV circuits from other SELV circuits		N/A
	SELV circuits insulated from accessible parts according Table X.1		N/A
	Plugs not able to enter 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
2.7 (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 enter socket-outlets of other voltage systems		N/A
	Socket outlets does not admit plugs of other voltage systems		N/A
	Socket-outlets does not have protective conductor contact		N/A
2.7 (4.31.3)	Other circuits		P
	Other circuits insulated from accessible parts according Table X.1		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 of above		N/A
	- conductive part not cause an electric shock in case of an insulation fault		N/A
	- equipotential bonding in master/slave applications		N/A

IEC 60598-2-2			
Clause	Requirement + Test	Result - Remark	Verdict
	- master luminaire provided with terminal for accessible conductive parts of slave luminaires		N/A
	- slave luminaire constructed as class I		N/A
2.7 (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

2.8 (11)	**CREEPAGE DISTANCES AND CLEARANCES**		**P**
2.8 (11.2)	Creepage distances and clearances .....:	See Table 1.7 (11.2)	P
	Working voltage (V) .....:	220-240V~	—
	Rated pulse voltage (kV).....:	N/A	—
	Voltage form.....:	Sinusoidal ☒ Non-sinusoidal ☐	—
	PTI .....:	< 600 ☒ ≥ 600 ☐	—
	Impulse withstand category (Normal category II) (Category III Annex U)	Category II ☒ Category III ☐	—

2.9 (7)	**PROVISION FOR EARTHING**		**N/A**
2.9 (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
	Earth makes contact first		N/A
	Terminal blocks with integrated screwless earthing contacts tested according Annex V		N/A
	Protective earthing of the luminaire not via built-in control gear		N/A
2.9 (7.2.2 + 7.2.3)	Earth continuity in joints, etc.		N/A
2.9 (7.2.4)	Locking of clamping means		N/A
	Compliance with 4.7.3		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Terminal blocks with integrated screwless earthing contacts tested according Annex V		N/A
2.9 (7.2.5)	Earth terminal integral part of connector socket		N/A
2.9 (7.2.6)	Earth terminal adjacent to mains terminals		N/A
2.9 (7.2.7)	Electrolytic corrosion of the earth terminal		N/A
2.9 (7.2.8)	Material of earth terminal		N/A
	Contact surface bare metal		N/A
2.9 (7.2.10)	Class II luminaire for looping-in		N/A
	Double or reinforced insulation to functional earth		N/A
2.9 (7.2.11)	Earthing core coloured green-yellow		N/A
	Length of earth conductor		N/A
2.10 (14)	**SCREW TERMINALS**		N/A
	Separately approved; component list.....:	(see Annex 1)	N/A
	Part of the luminaire .....:	(see Annex 3)	N/A
2.10 (15)	**SCREWLESS TERMINALS AND ELECTRICAL CONNECTIONS**		P
	Separately approved; component list.....:	(see Annex 1)	P
	Part of the luminaire .....:	(see Annex 4)	N/A
2.11 (5)	**EXTERNAL AND INTERNAL WIRING**		
2.11 (5.2)	**Supply connection and external wiring**		**P**
2.11 (5.2.1)	Means of connection.....:	Terminal block	P
	Outdoor luminaire has not PVC insulated external wiring if not class III or SELV ≤ 25 V a.c./60 V d.c. or protected from outdoor environment		N/A
2.11 (5.2.2)	Type of cable.....:	3239	P
	Nominal cross-sectional area (mm²).....:	0,75	P
	Cables equal to IEC 60227 or IEC 60245		P
2.11 (5.2.3)	Type of attachment, X, Y or Z		P
2.11 (5.2.5)	Type Z not connected to screws		N/A
2.11 (5.2.6)	Cable entries:		P
	- suitable for introduction		P
	- adequate degree of protection		P
2.11 (5.2.7)	Cable entries through rigid material have rounded edges		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

2.11 (5.2.8)	Insulating bushings:		N/A
	- suitably fixed		N/A
	- material in bushings		N/A
	- material not likely to deteriorate		N/A
	- tubes or guards made of insulating material		N/A
2.11 (5.2.9)	Locking of screwed bushings		N/A
2.11 (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
2.11 (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
2.11 (5.2.10.2)	Adequate cord anchorage for type Y and type Z attachment		P
2.11 (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

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Clause	Requirement + Test	Result - Remark	Verdict
2.11 (5.2.11)	External wiring passing into luminaire		P
2.11 (5.2.12)	Looping-in terminals		N/A
2.11 (5.2.13)	Wire ends not tinned		N/A
	Wire ends tinned: no cold flow		P
2.11 (5.2.14)	Mains plug same protection		N/A
	Class III luminaire plug		N/A
	No unsafe compatibility		N/A
2.11 (5.2.16)	Appliance inlets (IEC 60320)		N/A
	Installation couplers (IEC 61535)		N/A
	Other appliance inlet or connector according relevant IEC standard		N/A
2.11 (5.2.17)	No standardized interconnecting cables properly assembled		N/A
2.11 (5.2.18)	Used plug in accordance with		N/A
	- IEC 60083		N/A
	- other standard		N/A
2.11 (5.3)	**Internal wiring**		**P**
2.11 (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.....:	(see Annex 2)	N/A
	Green-yellow for earth only		N/A
2.11 (5.3.1.1)	Internal wiring connected directly to fixed wiring		P
	Cross-sectional area (mm^2) .....:	21AWG	P
	Insulation thickness		P
	Extra insulation added where necessary		N/A
2.11 (5.3.1.2)	Internal wiring connected to fixed wiring via internal current-limiting device		N/A
	Adequate cross-sectional area and insulation thickness		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
2.11 (5.3.1.3)	Double or reinforced insulation for class II		P
2.11 (5.3.1.4)	Conductors without insulation		N/A
2.11 (5.3.1.5)	SELV current-carrying parts		N/A
2.11 (5.3.1.6)	Insulation thickness other than PVC or rubber		N/A
2.11 (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
2.11 (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
2.11 (5.3.4)	Joints and junctions effectively insulated		N/A
2.11 (5.3.5)	Strain on internal wiring		N/A
2.11 (5.3.6)	Wire carriers		N/A
2.11 (5.3.7)	Wire ends not tinned		N/A
	Wire ends tinned: no cold flow		P

2.12 (8)	**PROTECTION AGAINST ELECTRIC SHOCK**		**P**
2.12 (8.2.1)	Live parts not accessible		P
	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		N/A
	Basic insulated parts not accessible with Ø 50 mm probe from outside, other types of luminaires		P
	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

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Clause	Requirement + Test	Result - Remark	Verdict
	Double-ended tungsten filament lamp		N/A
	Insulation lacquer not reliable		P
	Double-ended high pressure discharge lamp		N/A
	Relevant warning according to 3.2.18 fitted to the luminaire		N/A
2.12 (8.2.2)	Portable luminaire adjusted in most unfavourable position		N/A
2.12 (8.2.3.a)	Class II luminaire:		P
	- basic insulated metal parts not accessible during starter or lamp replacement		N/A
	- basic insulation not accessible other than during starter or lamp replacement		P
	- glass protective shields not used as supplementary insulation		N/A
2.12 (8.2.3.b)	BC lampholder of metal in class I luminaires shall be earthed		N/A
2.12 (8.2.3.c)	SELV circuits with exposed current carrying parts:		N/A
	Ordinary luminaire:		N/A
	- touch current .....:		N/A
	- no-load voltage.....:		N/A
	Other than ordinary luminaire:		N/A
	- nominal voltage .....:		N/A
2.12 (8.2.4)	Portable luminaire have protection independent of supporting surface		N/A
2.12 (8.2.5)	Compliance with the standard test finger or relevant probe		P
2.12 (8.2.6)	Covers reliably secured		P
2.12 (8.2.7)	Discharging of capacitors $\geq$ 0,5 μF		P
	Portable plug connected luminaire with capacitor		N/A
	Other plug connected luminaire with capacitor		N/A
	Discharge device on or within capacitor		P
	Discharge device mounted separately		N/A

2.13 (12)	**ENDURANCE TEST AND THERMAL TEST**	**P**
2.13.1 (-)	If IP > IP 20 relevant test of (12.4), (12.5) and (12.6) after (9.2) before (9.3) specified in 4.13	—
2.13 (12.3)	Endurance test:	P

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Clause	Requirement + Test	Result - Remark	Verdict
	- mounting-position.....:	Recessed mounting	—
	- test temperature (°C).....:	35	—
	- total duration (h).....:	240	—
	- supply voltage: Un factor; calculated voltage (V)...:	264V	—
	- lamp used .....:	Integral LED module	—
2.13 (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
2.13 (12.4)	Thermal test (normal operation)	(see Annex 2)	P
2.13 (12.5)	Thermal test (abnormal operation)	(see Annex 2)	P
2.13 (12.6)	Thermal test (failed lamp control gear condition):		N/A
2.13 (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
2.13 (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
2.13 (12.7)	Thermal test (failed lamp control gear in plastic luminaires):		N/A
2.13 (12.7.1)	Luminaire without temperature sensing control		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
2.13 (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..... :	See Table 2.16 (13.2.1)	N/A
2.13 (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.....:	See Table 2.16 (13.2.1)	
2.13 (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
2.13 (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 .....:		—

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Clause	Requirement + Test	Result - Remark	Verdict
	- highest measured temperature of fixing point/ exposed part (°C): .....:		—
	Ball-pressure test:.....:	See Table 2.16 (13.2.1)	N/A
2.13.1 (-)	Wiring, for connection to the supply, not reach unsafe temperature		N/A
	- measured temperature of the cable (°C) .....:		N/A

2.14 (9)	**RESISTANCE TO DUST, SOLID OBJECTS AND MOISTURE**		**P**
2.14 (-)	If IP > IP 20 the order of tests as specified in clause 2.12		P
2.14 (9.2)	Tests for ingress of dust, solid objects and moisture:		—
	- classification according to IP.....:	IP20	—
	- mounting position during test.....:	Recessed mounting	—
	- fixing screws tightened; torque (Nm).....:	2/3 torque	—
	- tests according to clauses .....:	9.2.0	—
	- 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		N/A
	d) i) For luminaires without drain holes – no water entry		N/A
	d) ii) For luminaires with drain holes – no hazardous water entry		N/A
	e) no water in watertight luminaire		N/A
	f) no contact with live parts (IP 2X)		P
	f) no entry into enclosure (IP 3X and IP 4X)		N/A
	f) no contact with live parts (IP3X and IP4X)		N/A
	g) no trace of water on part of lamp requiring protection from splashing water		N/A
	h) no damage of protective shield or glass envelope		N/A
2.14 (9.3)	Humidity test 48 h		P

2.15 (10)	**INSULATION RESISTANCE AND ELECTRIC STRENGTH**		**P**
2.15 (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	—
	Insulation resistance (MΩ).....:		—

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Clause	Requirement + Test	Result - Remark	Verdict
	SELV		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 Section 5 .....:		N/A
	Other than SELV		P
	- between live parts of different polarity.....:	199 MΩ	P
	- between live parts and mounting surface.....:	199 MΩ	P
	- between live parts and metal parts.....:	199 MΩ	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 .....:	199 MΩ	P
	- Insulation bushings as described in Section 5 .....:		N/A
2.15 (10.2.2)	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		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 Section 5 .....:		N/A
	Other than SELV		N/A
	- between live parts of different polarity.....:	1480V	P
	- between live parts and mounting surface.....:	2960V	P

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Clause	Requirement + Test	Result - Remark	Verdict
	- 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 .....:	2960V	P
	- Insulation bushings as described in Section 5 .....:		N/A
2.15 (10.3)	Touch current or protective conductor current (mA).:	0,01 mA	P

2.16 (13)	**RESISTANCE TO HEAT, FIRE AND TRACKING**		**P**
2.16 (13.2.1)	Ball-pressure test.....:	See Test Table 2.16 (13.2.1)	P
2.16 (13.3.1)	Needle-flame test (10 s) .....:	See Test Table 2.16 (13.3.1)	P
2.16 (13.3.2)	Glow-wire test (650°C).....:	See Test Table 2.16 (13.3.2)	P
2.16 (13.4)	Proof tracking test (IEC 60112).....:	See Test Table 2.16 (13.4)	N/A

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Clause	Requirement + Test	Result - Remark	Verdict

2.8 (11.2)	**TABLES: Creepage distances and clearances**	P
Table 11.1	**Minimum distances (mm) for a.c. (50/60 Hz) sinusoidal voltages**	

RMS working voltage (V) not exceeding	50	150	250	500	750	1000
Creepage distances						
Required basic insulation, PTI ≥ 600	0,6	0,8	1,5	3	4	5,5
Measured: Live parts of different polarity	--	--	--	--	--	--
Required basic insulation, PTI < 600	1,2	1,6	2,5	5	8	10
Measured	--	--	3,0	--	--	--
Required supplementary insulation PTI ≥ 600	-	0,8	1,5	3	4	5,5
Measured	--	--	--	--	--	--
Required supplementary insulation PTI < 600	-	1,6	2,5	5	8	10
Measured	--	--	--	--	--	--
Required reinforced insulation	-	3,2	5	6	8	11
Measured: Live parts and the outer accessible surface of insulating parts	--	--	6,0	--	--	--
Measured: Live parts and supporting surface	--	--	6,0	--	--	--
Clearances						
Required basic insulation	0,2	0,8	1,5	3	4	5,5
Measured: Live parts of different polarity	--	--	3,0	--	--	--
Required supplementary insulation	-	0,8	1,5	3	4	5,5
Measured	--	--	--	--	--	--
Required reinforced insulation	-	1,6	3	6	8	11
Measured: Live parts and the outer accessible surface of insulating parts	--	--	6,0	--	--	--
Measured: Live parts and supporting surface	--	--	6,0	--	--	--

Table 11.2	**Minimum distances (mm) for non-sinusoidal pulse voltages**	**N/A**

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Clause	Requirement + Test	Result - Remark	Verdict

Rated pulse voltage (peak kV)	2,0	2,5	3,0	4,0	5,0	6,0	8,0
Required clearances	1,0	1,5	2	3	4	5,5	8
Measured	--	--	--	--	--	--	--
Rated pulse voltage (peak kV)	10	12	15	20	25	30	40
Required clearances	11	14	18	25	33	40	60
Measured	--	--	--	--	--	--	--
Rated pulse voltage (peak kV)	50	60	80	100	-	-	-
Required clearances	75	90	130	170	-	-	-
Measured	--	--	--	--	--	--	--

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Clause	Requirement + Test	Result - Remark	Verdict

2.16 (13.2.1)	**TABLE: Ball Pressure Test of Thermoplastics**			**P**
Allowed impression diameter (mm)		2		—
Object/ Part No./ Material	Manufacturer/ trademark	Test temperature (°C)	Impression diameter (mm)	
Enclosure	CHI MEI CORPORATION	125	1,3	
Terminal box	FOSHAN CITY RUN LIANG PLASTIC CO., LTD	80	1,6	
PCB	GOLDENMAX INTERNATIONAL TECHNOLOGY (HANGZHOU) LTD	147	1,4	
	ZHEJIANG YUNKAI ELEC TECH CO LTD	147	1,4	
Lens	CHI MEI CORPORATION	141	1,6	
Supplementary information:				

2.16 (13.3.1)	**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
PCB	GOLDENMAX INTERNATIONAL TECHNOLOGY (HANGZHOU) LTD	10	No	0	P
	ZHEJIANG YUNKAI ELEC TECH CO LTD	10	No	0	P
Supplementary information:					

2.16 (13.3.2)	**TABLE: Glow-wire test (IEC 60695-2-11)**				**P**
Glow wire temperature .....:		650°C			—
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
Terminal box	FOSHAN CITY RUN LIANG PLASTIC CO., LTD	30	No	0	P

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Clause	Requirement + Test	Result - Remark	Verdict

Lens	CHI MEI CORPORATION	30	No	0	P
Enclosure	CHI MEI CORPORATION	30	No	0	P
Any flame or glowing of the sample extinguished within 30 s of withdrawing the glow-wire, and any burning or molten drop did not ignite the underlying parts (Yes/No).....:					Yes
Supplementary information:					

2.16 (13.4)	**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:					

ANNEX 1	**TABLE: Critical components information**					P
Object / part No.	**Code**	**Manufacturer/ trademark**	**Type / model**	**Technical data**	**Standard**	**Mark(s) of conformity[1)]**
(See the latest Data form for electrical equipment and machinery)						

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

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Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 2	TABLE: Temperature measurements, thermal tests of Section 12		P
	Type reference ..... :	SL82 7W	—
	Lamp used..... :	Integral LED module	—
	Lamp control gear used ..... :	N/A	—
	Mounting position of luminaire..... :	Recessed mounting	—
	Supply wattage (W) ..... :	6,58	—
	Supply current (A)..... :	0,058	—
	Calculated power factor ..... :	0,447	—
	Table: measured temperatures corrected for ta = 25 °C:		P
	- abnormal operating mode..... :	Output short-circuit	—
	- test 1: rated voltage ..... :	N/A	—
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage..... :	254,4V	—
	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage ..... :	N/A	—
	- test 4: 1,1 times rated voltage or 1,05 times rated wattage..... :	264V	—
	Through wiring or looping-in wiring loaded by a current of A during the test ..... :	N/A	—

Temperature measurements, (°C)

Part	Ambient	Clause 12.4 – normal				Clause 12.5 – abnormal	
		test 1	test 2	test 3	limit	test 4	limit
Driver PCB	25,0	--	96,5	--	130	--	--
Internal wire	25,0	--	98,4	--	200	--	--
Driver house	25,0	--	70,6	--	300	--	--
LED PCB	25,0	--	114,2	--	288	--	--
Lens	25,0	--	116,0	--	115	--	--
Ring fixed lens	25,0	--	50,4	--	90	--	--
Enclosure	25,0	--	60,0	--	90	--	--
Supply wire	25,0	--	53,4	--	200	--	--
Cord anchorage	25,0	--	50,5	--	90	--	--
Accessible	25,0	--	52,3	--	90	--	--
Terminal block	25,0	--	55.2	--	110	--	--
Terminal box	25,0	--	54.9	--	90	--	--
Mounting surface	25,0	--	32,5	--	90	25,3	130

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

Supplementary information:

ANNEX 2	TABLE: Temperature measurements, thermal tests of Section 12		P
	Type reference ..... :	SL82-LD-3S 7W	—
	Lamp used..... :	Integral LED module	—
	Lamp control gear used ..... :	N/A	—
	Mounting position of luminaire..... :	Recessed mounting	—
	Supply wattage (W) ..... :	6,23	—
	Supply current (A)..... :	0,055	—
	Calculated power factor ..... :	0,446	—
	Table: measured temperatures corrected for ta = 25 °C:		P
	- abnormal operating mode..... :	Output short-circuit	—
	- test 1: rated voltage ..... :	N/A	—
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage..... :	254,4V	—
	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage ..... :	N/A	—
	- test 4: 1,1 times rated voltage or 1,05 times rated wattage..... :	264V	—
	Through wiring or looping-in wiring loaded by a current of A during the test ..... :	N/A	—

Temperature measurements, (°C)

Part	Ambient	Clause 12.4 – normal				Clause 12.5 – abnormal	
		test 1	test 2	test 3	limit	test 4	limit
Driver PCB	25,0	--	103.4	--	130	--	--
Internal wire	25,0	--	99.1	--	200	--	--
Driver house	25,0	--	84.4	--	300	--	--
LED PCB	25,0	--	94.8	--	288	--	--
Lens	25,0	--	93.6	--	115	--	--
Ring fixed lens	25,0	--	75.0	--	90	--	--
Enclosure	25,0	--	44.5	--	90	--	--
Supply wire	25,0	--	63.5	--	200	--	--
Cord anchorage	25,0	--	60.9	--	90	--	--
Accessible	25,0	--	44.5	--	90	--	--
Mounting surface	25,0	--	30.8	--	90	26,8	130

Supplementary information:

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

ANNEX 2	TABLE: Temperature measurements, thermal tests of Section 12		P
	Type reference .....:	SL82-SD 7W	—
	Lamp used.....:	Integral LED module	—
	Lamp control gear used .....:	N/A	—
	Mounting position of luminaire.....:	Recessed mounting	—
	Supply wattage (W) .....:	6,78	—
	Supply current (A).....:	0,031	—
	Calculated power factor .....:	0,862	—
	Table: measured temperatures corrected for ta = 25 °C:		P
	- abnormal operating mode.....:	Output short-circuit	—
	- test 1: rated voltage .....:	N/A	—
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage.....:	254,4V	—
	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage .....:	N/A	—
	- test 4: 1,1 times rated voltage or 1,05 times rated wattage.....:	264V	—
	Through wiring or looping-in wiring loaded by a current of A during the test .....:	N/A	—

Temperature measurements, (°C)

Part	Ambient	Clause 12.4 – normal				Clause 12.5 – abnormal	
		test 1	test 2	test 3	limit	test 4	limit
Driver PCB	25,0	--	121.7	--	130	--	--
Internal wire	25,0	--	93.8	--	200	--	--
Driver house	25,0	--	94.5	--	300	--	--
LED PCB	25,0	--	102.2	--	288	--	--
Lens	25,0	--	104.3	--	115	--	--
Ring fixed lens	25,0	--	55.3	--	90	--	--
Enclosure	25,0	--	84.9	--	90	--	--
Supply wire	25,0	--	70.3	--	200	--	--
Cord anchorage	25,0	--	66.2	--	90	--	--
Accessible	25,0	--	46.7	--	90	--	--
Mounting surface	25,0	--	30.8	--	90	26,8	130
Supplementary information:							

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

ANNEX 3	**Screw terminals (part of the luminaire)**		N/A
(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).....:		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

ANNEX 4	**Screwless terminals (part of the luminaire)**		N/A
(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

IEC 60598-2-2			
Clause	Requirement + Test	Result - Remark	Verdict
(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
(15.5.1)	Terminals internal wiring		N/A
(15.5.1.1)	Pull test spring-type terminals (4 N, 4 samples).....:		N/A
(15.5.1.2)	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 external wiring		N/A
	Terminal size and rating		N/A
(15.6.2.1)	Pull test spring-type terminals or welded connections (4 samples); pull (N) .....:		N/A
	Pull test pin or tab terminals (4 samples); pull (N) .....:		N/A

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

(15.6.3.1)	**TABLE: Contact resistance test**										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										N/A
	Voltage drop after 10th alt. 25th cycle										N/A
	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										N/A
	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										N/A
	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										N/A
	Max. allowed voltage drop (mV)..... :										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)											N/A
											N/A
Supplementary information:											

IEC60598_2_2D – Appendix 1			
Clause	Requirement + Test	Result - Remark	Verdict

ATTACHMENT TO TEST REPORT IEC 60598-2-2
EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES
Luminaires
Part 2: Particular requirements
Section 2: Recessed luminaires

Differences according to .....:	EN 60598-2-2:2012 used in conjunction with EN 60598-1:2015
Annex Form No..... :	EU_GD_IEC60598_2_2D
Annex Form Originator..... :	OVE
Master Annex Form..... :	2014-11

	CENELEC COMMON MODIFICATIONS (EN)		**P**
2.6 (3)	**MARKING**		**P**
2.6 (3.3.101)	For luminaires not supplied with terminal block: Adequate warning on the package		N/A
2.7 (4)	**CONSTRUCTION**		**N/A**
2.7 (4.11.6)	Electro-mechanical contact systems		N/A
2.11 (5)	**EXTERNAL AND INTERNAL WIRING**		**P**
2.11 (5.2.1)	Connecting leads		P
	- without a means for connection to the supply		P
	- terminal block specified		P
	- relevant information provided		P
	- compliance with 4.6, 4.7.1, 4.7.2, 4.10.1, 11.2, 12 and 13.2 of Part 1		N/A
2.11 (5.2.2)	Cables equal to EN 50525		P
	Replace table 5.1 – Supply cord		P
2.13 (12)	**ENDURANCE TESTS AND THERMAL TESTS**		**P**
2.13 (12.4.2c)	Thermal test (normal operation) see footnote c to table 12.2 relating to unsleeved fixed wiring		P

IEC60598_2_2D – Appendix 1			
Clause	Requirement + Test	Result - Remark	Verdict

ZB	ANNEX ZB, SPECIAL NATIONAL CONDITIONS (EN)		N/A
(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, SE, GB: type of plug		N/A

ZC	ANNEX ZC, NATIONAL DEVIATIONS (EN)		N/A
(4 & 5)	FR: Shuttered socket-outlets 10/16A		N/A
	GB: Requirements according to United Kingdom Building Regulation		N/A

Appendix 2 - Requirements of EN 62031:2008/A2:2015			
Clause	Requirement + Test	Result - Remark	Verdict

6	**CLASSIFICATION**		**P**
	Built-in module ..... :	Yes ☐ No ☒	—
	Independent module..... :	Yes ☐ No ☒	—
	Integral module ..... :	Yes ☒ No ☐	—
	For Integral module; Note to 1.2.1 in IEC 60598-1 applies.		P

13.2	Module withstands overpower condition >15 min.		P
	Module with automatic protective device or power limiter, test performed 15 min. at limit.		N/A
	During the tests, tissue paper, spread below module, does not ignite		P

14	**TABLE: tests of fault conditions**	**P**
Part	Simulated fault	Hazard
LED module	Short-circuited: LED no work recoverable	No

Appendix 3 – Requirements of EN 62471:2008

Table 6.1	Emission limits for risk groups of continuous wave lamps (based on EU Directive 2006/25/EC) 2835 9V/100mA								
Risk	Action spectrum	Symbol	Units	Emission Measurement					
				Exempt		Low risk		Mod risk	
				Limit	Result	Limit	Result	Limit	Result
Actinic UV	SUV(λ)	Es	W•m-2	0,001	$9{,}4 \times 10^{-6}$	-	-	-	-
Near UV		EUVA	W•m-2	0,33	$2{,}7 \times 10^{-4}$	-	-	-	-
Blue light	B(λ)	LB	W•m-2•sr-1	100	$1{,}8 \times 10^{1}$	10000	--	4000000	--
Blue light, small source	B(λ)	EB	W•m-2	0,01*	$4{,}6 \times 10^{-1}$	1,0	--	400	--
Retinal thermal	R(λ)	LR	W•m-2•sr-1	28000/α	$6{,}0 \times 10^{2}$	28000/α	--	71000/α	--
Retinal thermal, weak visual stimulus**	R(λ)	LIR	W•m-2•sr-1	545000 0,0017≤ α ≤ 0,011	-				
				6000/α	0,16				
IR radiation, eye		EIR	W•m-2	100	0	570	---	3200	---

* Small source defined as one with α < 0,011 radian. Averaging field of view at 10000 s is 0,1 radian.
** Involves evaluation of non-GLS source

NOTE The action functions: see Table 4.1 and Table 4.2
The applicable aperture diameters: see 4.2.1
The limitations for the angular subtenses: see 4.2.2
The related measurement condition 5.2.3 and the range of acceptance angles: see Table 5.5.

Table 6.1	Emission limits for risk groups of continuous wave lamps (based on EU Directive 2006/25/EC) 2835 36V/30mA	

Appendix 3 – Requirements of EN 62471:2008

Table 6.1	Emission limits for risk groups of continuous wave lamps (based on EU Directive 2006/25/EC) 2835 9V/100mA								
Risk	Action spectrum	Symbol	Units	Emission Measurement					
				Exempt		Low risk		Mod risk	
				Limit	Result	Limit	Result	Limit	Result
Actinic UV	SUV(λ)	Es	W•m-2	0,001	$6,6 \times 10^{-7}$	-	-	-	-
Near UV		EUVA	W•m-2	0,33	$4,5 \times 10^{-5}$	-	-	-	-
Blue light	B(λ)	LB	W•m-2•sr-1	100	$1,8 \times 10^{1}$	10000	--	4000000	--
Blue light, small source	B(λ)	EB	W•m-2	0,01*	$3,7 \times 10^{-3}$	1,0	--	400	--
Retinal thermal	R(λ)	LR	W•m-2•sr-1	28000/α	$1,0 \times 10^{3}$	28000/α	--	71000/α	--
Retinal thermal, weak visual stimulus**	R(λ)	LIR	W•m-2•sr-1	545000 0,0017≤ α ≤ 0,011	-				
				6000/α	$3,2 \times 10^{1}$				
IR radiation, eye		EIR	W•m-2	100	0	570	---	3200	---

* Small source defined as one with α < 0,011 radian. Averaging field of view at 10000 s is 0,1 radian.
** Involves evaluation of non-GLS source

NOTE The action functions: see Table 4.1 and Table 4.2
The applicable aperture diameters: see 4.2.1
The limitations for the angular subtenses: see 4.2.2
The related measurement condition 5.2.3 and the range of acceptance angles: see Table 5.5.

Table 6.1	Emission limits for risk groups of continuous wave lamps (based on EU Directive 2006/25/EC) 2835 18V/60mA	

Appendix 3 – Requirements of EN 62471:2008

Table 6.1	Emission limits for risk groups of continuous wave lamps (based on EU Directive 2006/25/EC) 2835 9V/100mA									
Risk	Action spectrum	Symbol	Units	Emission Measurement					
				Exempt		Low risk		Mod risk	
				Limit	Result	Limit	Result	Limit	Result
Actinic UV	SUV(λ)	Es	W•m-2	0,001	$1,6 \times 10^{-6}$	-	-	-	-
Near UV		EUVA	W•m-2	0,33	$2,3 \times 10^{-4}$	-	-	-	-
Blue light	B(λ)	LB	W•m-2•sr-1	100	$1,2 \times 10^{1}$	10000	--	4000000	--
Blue light, small source	B(λ)	EB	W•m-2	0,01*	$7,7 \times 10^{-2}$	1,0	--	400	--
Retinal thermal	R(λ)	LR	W•m-2•sr-1	28000/α	$5,2 \times 10^{2}$	28000/α	--	71000/α	--
Retinal thermal, weak visual stimulus**	R(λ)	LIR	W•m-2•sr-1	545000 0,0017≤ α ≤ 0,011	-				
				6000/α	2,2				
IR radiation, eye		EIR	W•m-2	100	0	570	---	3200	---

* Small source defined as one with α < 0,011 radian. Averaging field of view at 10000 s is 0,1 radian.
** Involves evaluation of non-GLS source

NOTE The action functions: see Table 4.1 and Table 4.2
The applicable aperture diameters: see 4.2.1
The limitations for the angular subtenses: see 4.2.2
The related measurement condition 5.2.3 and the range of acceptance angles: see Table 5.5.

Appendix 4 - Requirements of IEC/TR 62778:2014			
Clause	Requirement + Test	Result - Remark	Verdict

7	**MEASUREMENT INFORMATION FLOW**		
7.1	**Basic flow**		
	'Law of conservation of luminance' applied		P
	Use of only true luminance/radiance values		P
	In case of luminaire: The light source is operated in the luminaire under similar conditions as when tested as a component		P
	In case E_{thr} value for RG2 was established the peak value was derived from angular light distribution		N/A
7.2	**Conditions for the radiance measurement**		
	Standard condition applied (200mm distance, 0,011rad field of view)		P
	Non-standard condition applied		N/A
7.3	**Special cases (I): Replacement by a lamp or LED module of another type**		
	Light source is a white light source		N/A
	Evaluation done based on highest luminance		N/A
	Evaluation done based on CCT value		N/A
7.4	**Special cases (II): Arrays and clusters of primary light sources**		
	LED package is evaluated as .....:	☒ RG0 unlimited ☐ RG1 unlimited	P
	E_{thr} of LED package applies to array		N/A
8	**RISK GROUP CLASSIFICATION**		
	Risk group achieved:		P
	-...Risk Group 0 unlimited		P
	-...Risk Group 1 unlimited		N/A
	- E_{thr} ..... (lx) : Distance to reach RG1..... (m) :		N/A

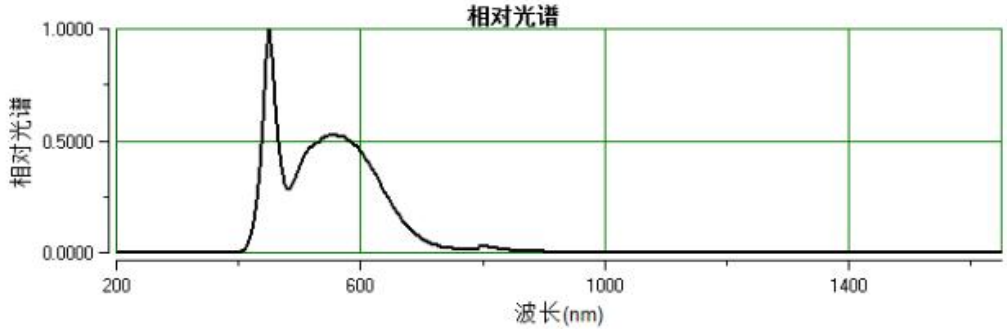
Appendix 4 - Requirements of IEC/TR 62778:2014			
Clause	Requirement + Test	Result - Remark	Verdict

	TABLE: Spectroradiometric measurement		
	Measurement performed on:	☐ **LED package** ☐ **LED module** ☐ **Lamp** ☒ **Luminaire**	
	Model number	SL82 7W	
	Test voltage (V)	240V	—
	Test current (mA)	61mA	—
	Test frequency (Hz)	50	—
	Ambient, t (°C)	25	—
	Measurement distance	☒ 20 cm ☐ ... cm	—
	Source size	☒ Non-small ☐ Small : .... mm	—
	Field of view	☐ 100 mrad ☒ 11 mrad ☐ 1,7 mrad (for small sources)	—

Item	Symbol	Units	Result	Remark
Correlated colour temperature	CCT	K	6445	2835 9V/100mA
x/y colour coordinates			/	
Blue light hazard radiance	L_B	W/(m²•sr¹)	99	RG0
Blue light hazard irradiance	E_B	W/m²	0,2844	
Luminance	L	cd/m²	1,16 x 10⁵	
Illuminance	E	lx	3986	

Supplementary information:

	TABLE: Angular light distribution	



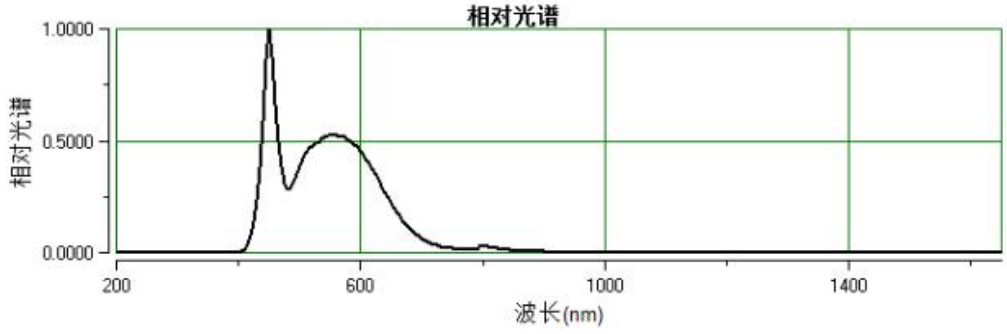
Appendix 4 - Requirements of IEC/TR 62778:2014			
Clause	Requirement + Test	Result - Remark	Verdict

	TABLE: Spectroradiometric measurement		
	Measurement performed on:	☐ **LED package** ☐ **LED module** ☐ **Lamp** ☒ **Luminaire**	
	Model number	SL82 7W	
	Test voltage (V)	240V	—
	Test current (mA)	61mA	—
	Test frequency (Hz)	50	—
	Ambient, t (°C)	25	—
	Measurement distance	☒ 20 cm ☐ ... cm	—
	Source size	☒ Non-small ☐ Small : .... mm	—
	Field of view	☐ 100 mrad ☒ 11 mrad ☐ 1,7 mrad (for small sources)	—

Item	Symbol	Units	Result	Remark
Correlated colour temperature	CCT	K	6452	2835 36V/30mA
x/y colour coordinates			/	
Blue light hazard radiance	L_B	W/(m²•sr¹)	93	RG0
Blue light hazard irradiance	E_B	W/m²	3,238	
Luminance	L	cd/m²	1,065 x 10⁵	
Illuminance	E	lx	3721	

Supplementary information:

	TABLE: Angular light distribution	



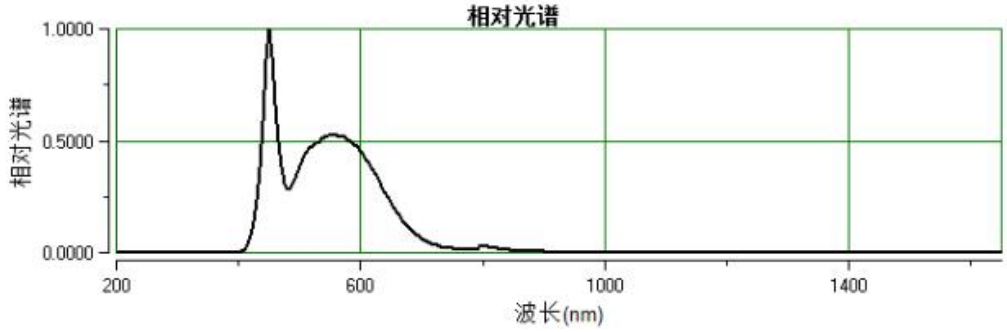
Appendix 4 - Requirements of IEC/TR 62778:2014			
Clause	Requirement + Test	Result - Remark	Verdict

	TABLE: Spectroradiometric measurement		
	Measurement performed on:	☐ **LED package** ☐ **LED module** ☐ **Lamp** ☒ **Luminaire**	
	Model number	SL82 7W	
	Test voltage (V)	240V	—
	Test current (mA)	61mA	—
	Test frequency (Hz)	50	—
	Ambient, t (°C)	25	—
	Measurement distance	☒ 20 cm ☐ ... cm	—
	Source size	☒ Non-small ☐ Small : .... mm	—
	Field of view	☐ 100 mrad ☒ 11 mrad ☐ 1,7 mrad (for small sources)	—

Item	Symbol	Units	Result	Remark
Correlated colour temperature	CCT	K	6282	2835 18V/60mA
x/y colour coordinates			/	
Blue light hazard radiance	L_B	W/(m²•sr¹)	43	RG0
Blue light hazard irradiance	E_B	W/m²	0,3587	
Luminance	L	cd/m²	5,098 x 10⁴	
Illuminance	E	lx	5439	

Supplementary information:

	TABLE: Angular light distribution	



Appendix 5 - Requirements of EN 61347-2-13:2014 used in conjunction with EN 61347-1:2015			
Clause	Requirement + Test	Result - Remark	Verdict

14 (14)	**FAULT CONDITIONS**		**P**
- (14)	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		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
- (14.1)	Short-circuit of creepage distances and clearances if less than specified in clause 16 in Part 1 (except between live parts and accessible metal parts)	(see appended table)	P
	Creepage distances on printed boards less than specified in clause 16 in Part 1 provided with coating according to IEC 60664-3		N/A
- (14.2)	Short-circuit or interruption of semiconductor devices	(see appended table)	P
- (14.3)	Short-circuit across insulation consisting of lacquer, enamel or textile	(see appended table)	N/A
- (14.4)	Short-circuit across electrolytic capacitors	(see appended table)	P
- (14.5)	After the tests has been carried out on three samples:		P
	The insulation resistance ≥ 1 MΩ ..... :	>19	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
- (14.6)	Relevant fault condition tests with high-power supply	N/A	—
14 (-)	Temperature declared thermally protected lamp controlgear fulfil requirements in Annex C		N/A

16 (-)	**ABNORMAL CONDITIONS**		**P**
16.1 (-)	Control gear which are of the constant voltage output type:		N/A
	a) No LED module inserted		N/A
	b) Double LED modules or equivalent load connected to the output terminals		N/A

Appendix 5 - Requirements of EN 61347-2-13:2014 used in conjunction with EN 61347-1:2015			
Clause	Requirement + Test	Result - Remark	Verdict
	c) Output terminal short-circuited (20 cm and 200 cm or declared length)		N/A
	During and at the end of the tests no defect impairing safety, nor any smoke or flammable gases produced		N/A
16.2 (-)	Control gear which are of the constant current output type		P
	a) No LED module connected		P
	b) Double the LED modules or equivalent load connected in series to the output terminals		P
	c) Output terminal short-circuited (20 cm and 200 cm or declared length)		P
	Maximum output voltage not exceeded		P
	During and at the end of the tests no defect impairing safety, nor any smoke or flammable gases produced		P

20 (18)	**RESISTANCE TO HEAT, FIRE AND TRACKING**		**P**
- (18.2)	Test of printed boards:		P
	- part tested ..... :	PCB	P
	- part tested ..... :		N/A

14	**TABLE: tests of fault conditions**	**P**
Part	Simulated fault	Hazard
For model SL82 7W		
BD1	Short-circuited – Fuse resistor broken	No
C1	Short-circuited – Not work	No
C3	Short-circuited – Not work	No
C4	Short-circuited – Not work	No
C5	Short-circuited – Not work	No
D1	Short-circuited – Not work	No
U2	Short-circuited – Not work	No
For model SL82-LD-3S 7W		
DB1	Short-circuited – Fuse resistor broken	No
C1	Short-circuited – Not work	No
C2	Short-circuited – Not work	No
C3	Short-circuited – Not work	No
D1	Short-circuited – Not work	No
U1	Short-circuited – Not work	No
For model SL82-SD 7W		
DB1	Short-circuited – Fuse resistor broken	No

Appendix 5 - Requirements of EN 61347-2-13:2014 used in conjunction with EN 61347-1:2015			
Clause	Requirement + Test	Result - Remark	Verdict
C1	Short-circuited – Not work		No
C2	Short-circuited – Not work		No
C3	Short-circuited – Not work		No
C4	Short-circuited – Not work		No
C5	Short-circuited – Not work		No
C6	Short-circuited – Not work		No
D1	Short-circuited – Not work		No
U1	Short-circuited – Not work		No

Appendix 6 - Requirements of EN 62493:2015

4	**LIMITS**		P
4.1	**General**		P
	Comply with Van der Hoofden test limit in 4.2.3 or inherently compliant in 4.2.2 and pass assessment procedure for intentional radiators in 4.3		P
4.2	**Unintentional radiating part of lighting equipment**		P
4.2.2	Lighting equipment deemed to comply with the Van der Hoofden test without testing		P
	1) electronic controlgear	Yes ☐ No ☒	—
	2) incandescent-lamp technology	Yes ☐ No ☒	—
	3) LED-light-source technology	Yes ☒ No ☐	—
	4) OLED-light-source technology	Yes ☐ No ☒	—
	5) high-pressure discharge lamp LED-light-source technologies	Yes ☐ No ☒	—
	6) low-pressure discharge lamp technologies with exposure distance ≥ 50 cm	Yes ☐ No ☒	—
	7) independent auxiliary	Yes ☐ No ☒	—
	Not fulfil any of 1-7 above subject to 4.2.3		—
4.2.3	Applications of limits		N/A
	Not fulfil any of 1-7 in 4.2.2 but the compliance factor *F* is ≤ 1		N/A
4.3	**Intentional radiating part of lighting equipment**		**N/A**
	Comply with one of methods in Clause 7 if intentional radiator		**N/A**

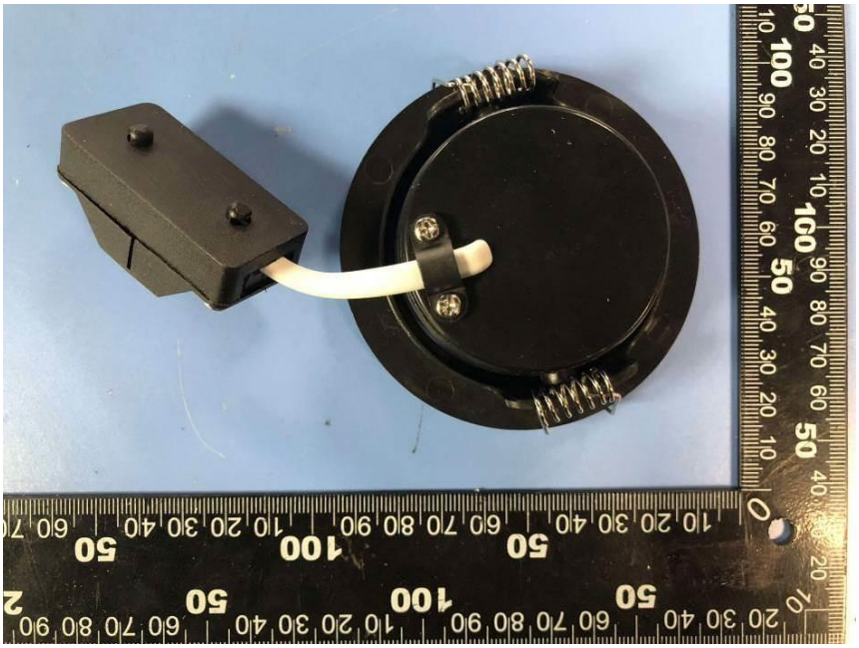
5	**GENERAL**	**N/A**

6	**MEASUREMENT PROCEDURE FOR THE VAN DER HOOFDEN TEST**	**N/A**

7	**ASSESSMENT PROCEDURE INTENTIONAL RADIATORS**	**N/A**

Appendix 7 - Photographs

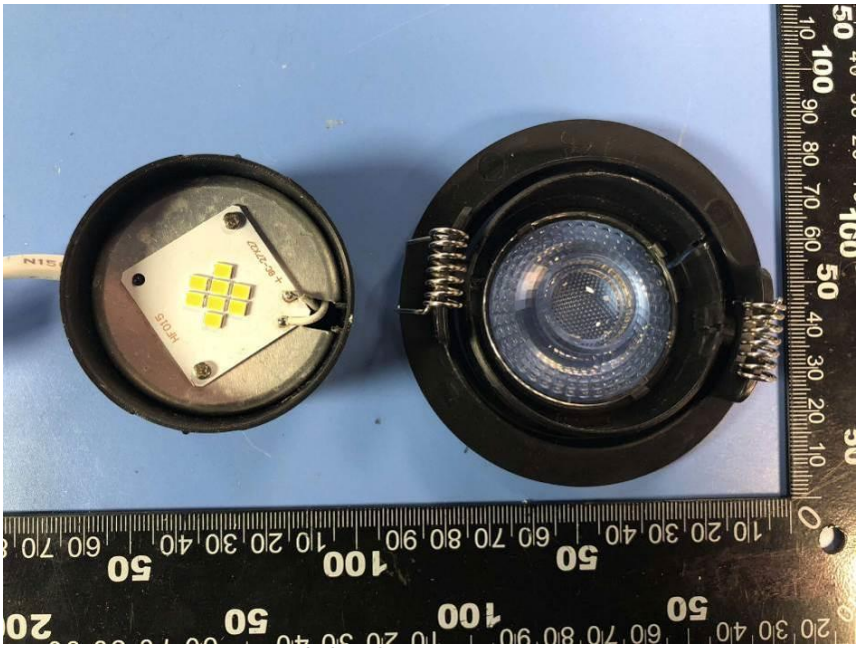
SL82 7W; SL82 5W



SL82 7W; SL82 5W

Appendix 7 - Photographs

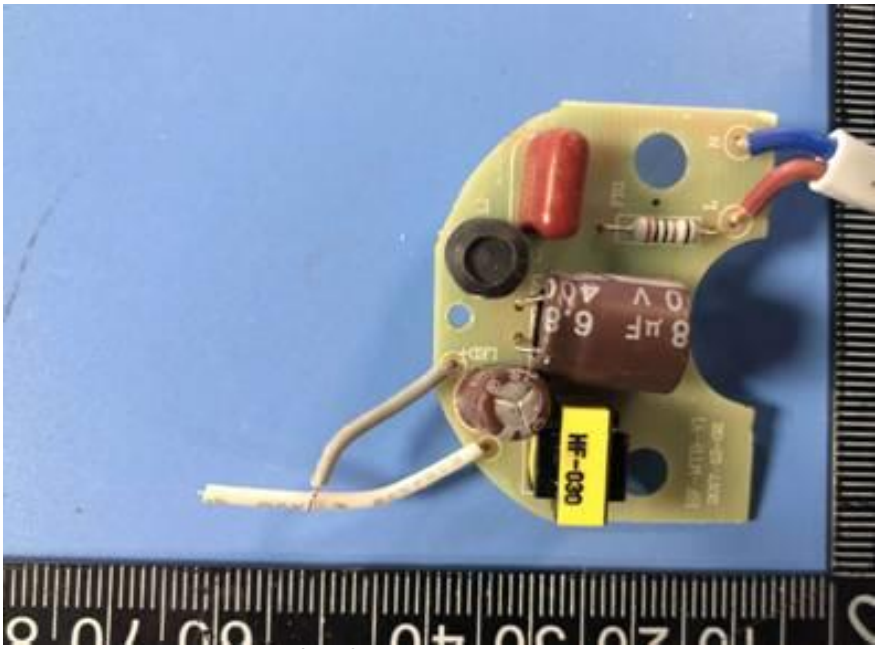
Teminal block for SL82 7W; SL82 5W



Internal view for SL82 7W; SL82 5W

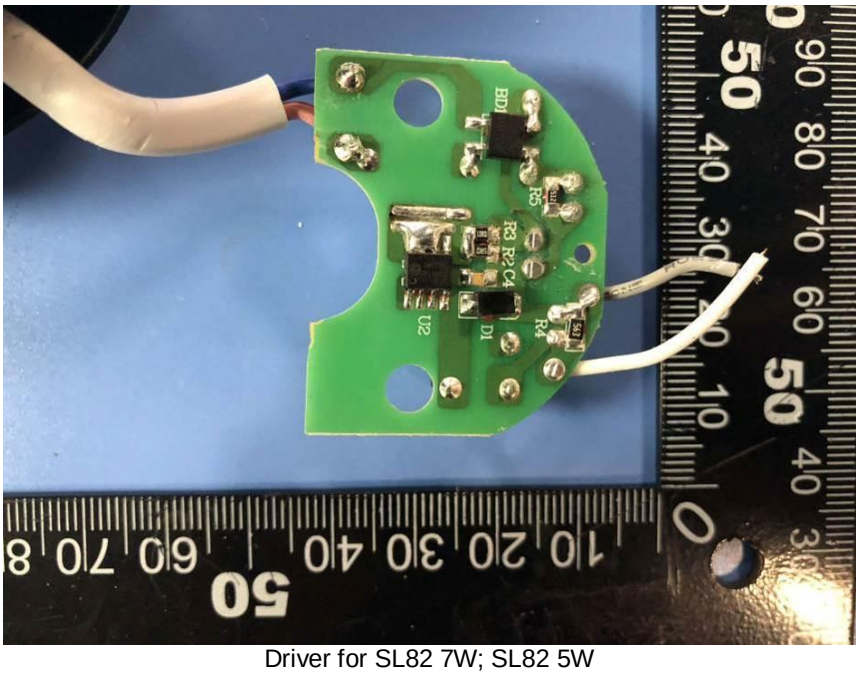
Appendix 7 - Photographs

Internal view for SL82 7W; SL82 5W

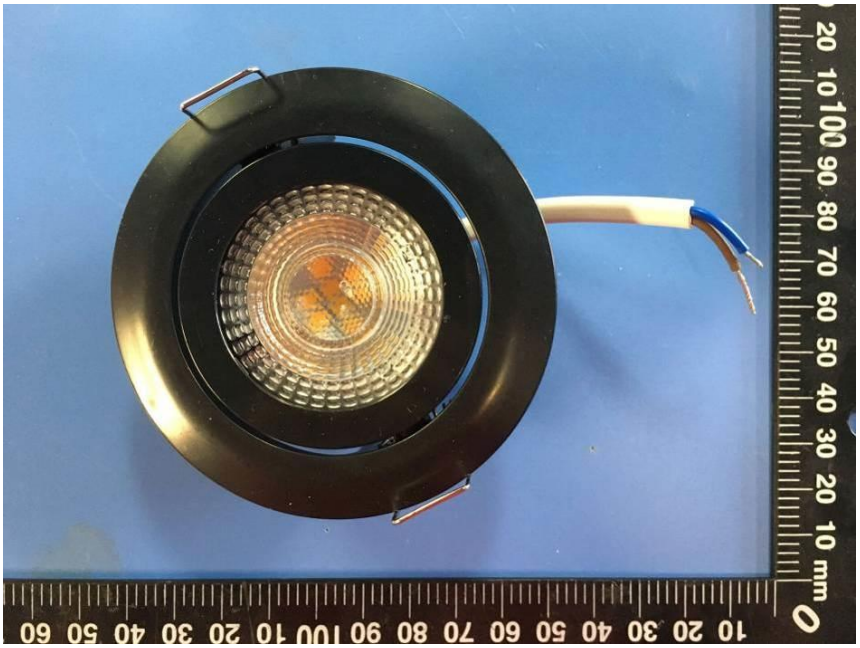


Driver for SL82 7W; SL82 5W

Appendix 7 - Photographs

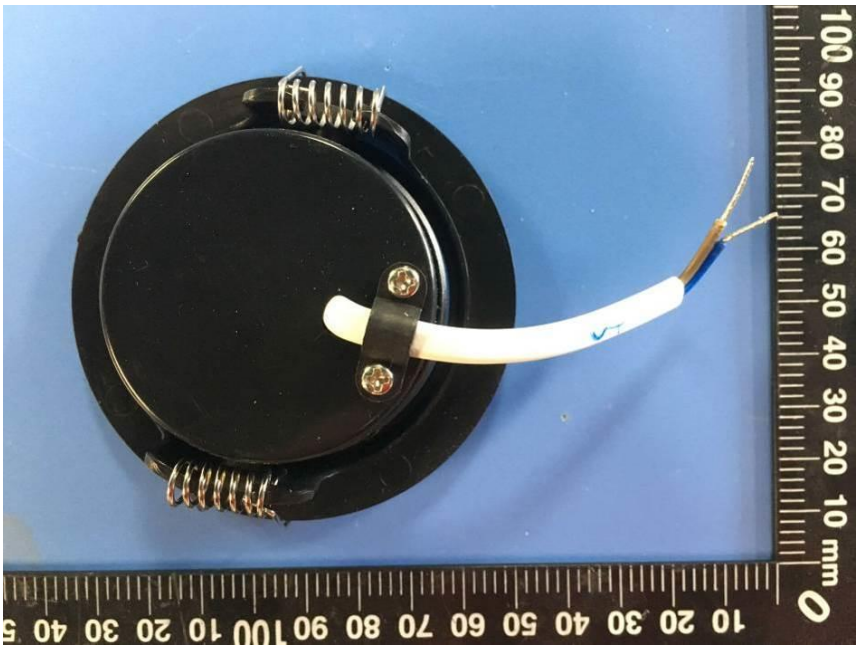


Driver for SL82 7W; SL82 5W

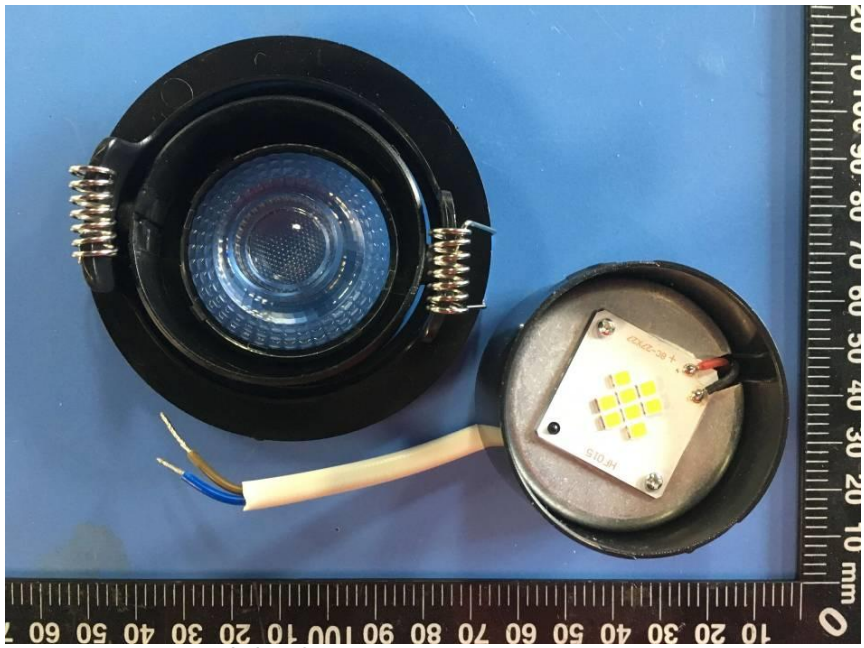


SL82-LD-3S 5W; SL82-LD-3S 7W

Appendix 7 - Photographs

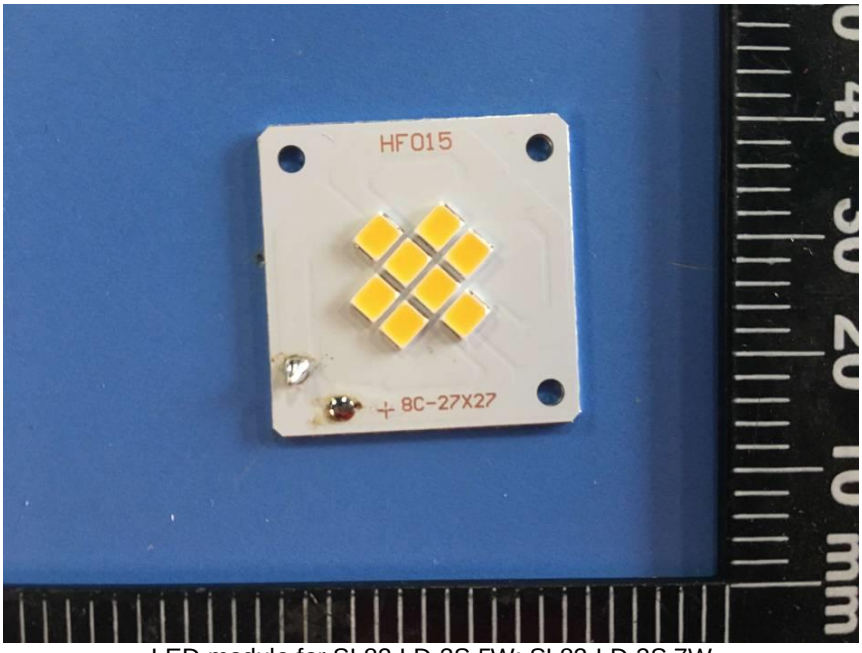


SL82-LD-3S 5W; SL82-LD-3S 7W



Internal view for SL82-LD-3S 5W; SL82-LD-3S 7W

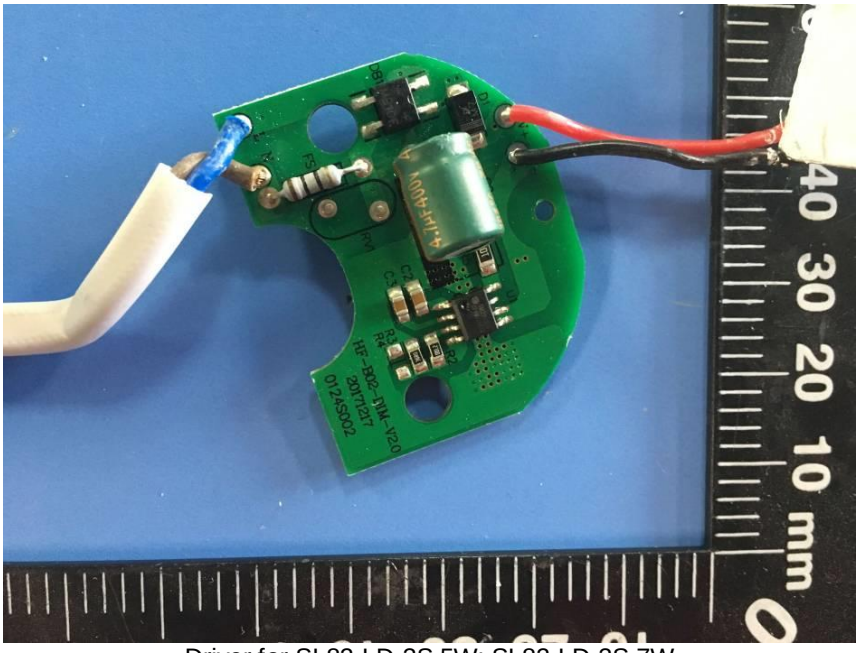
Appendix 7 - Photographs



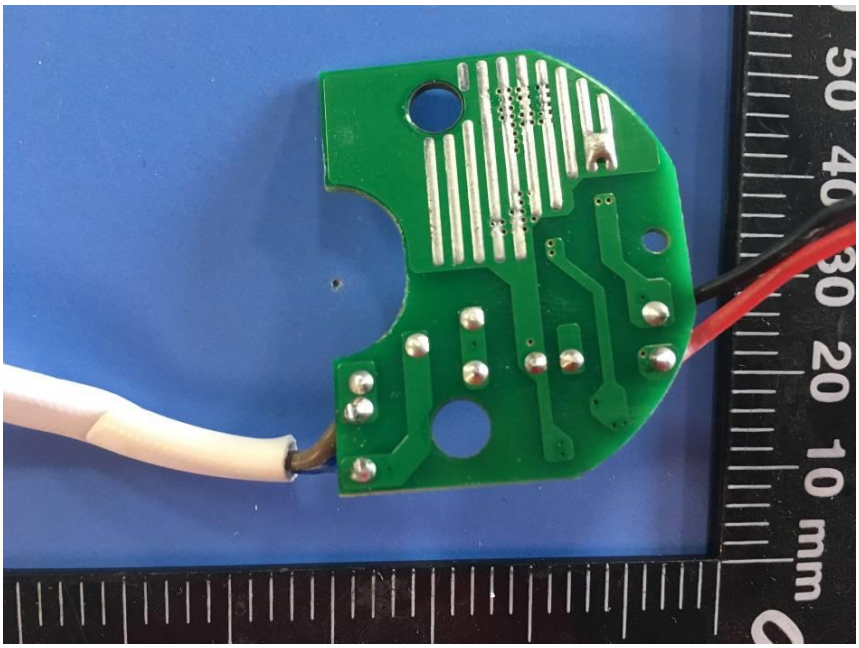
LED module for SL82-LD-3S 5W; SL82-LD-3S 7W

Internal view for SL82-LD-3S 5W; SL82-LD-3S 7W

Appendix 7 - Photographs

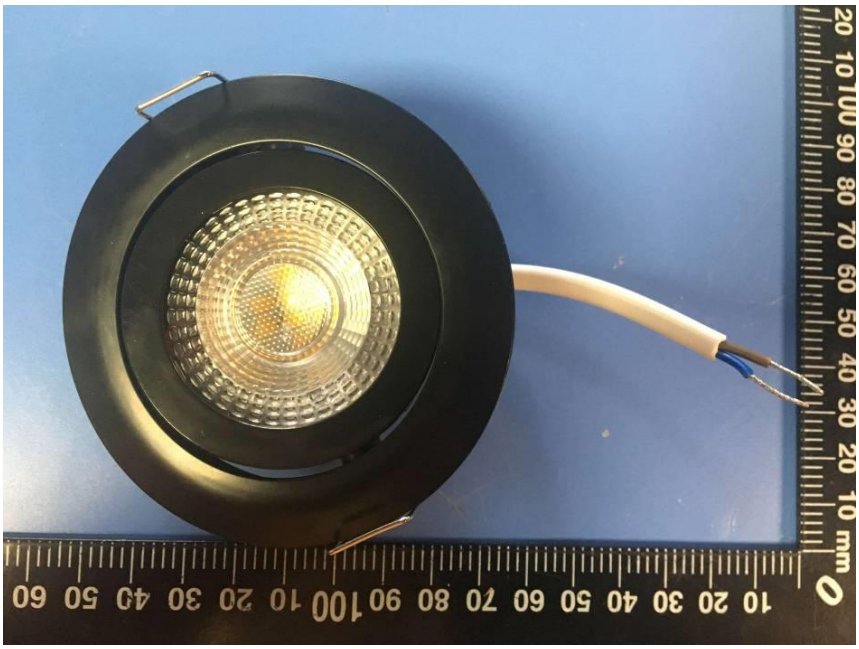


Driver for SL82-LD-3S 5W; SL82-LD-3S 7W

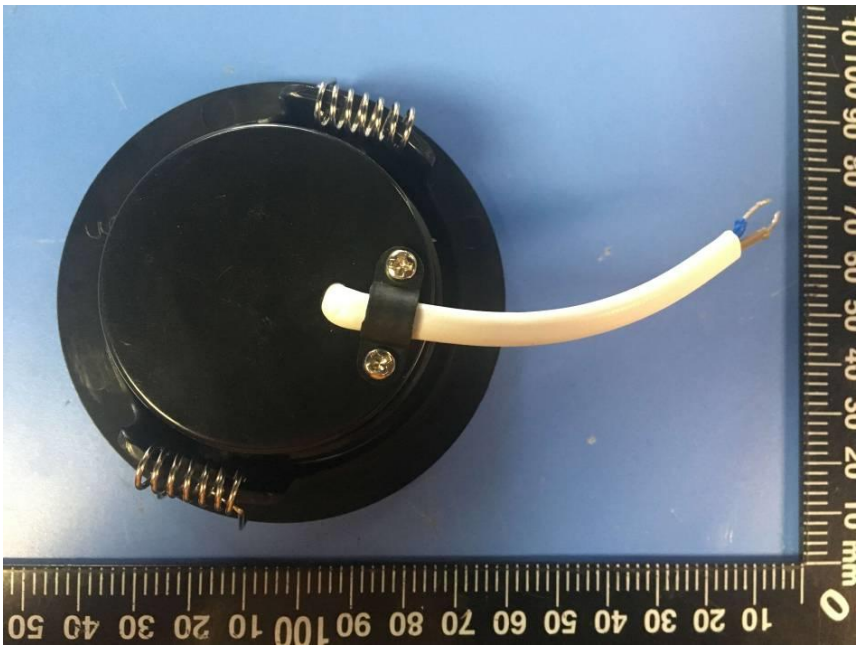


Driver for SL82-LD-3S 5W; SL82-LD-3S 7W

Appendix 7 - Photographs

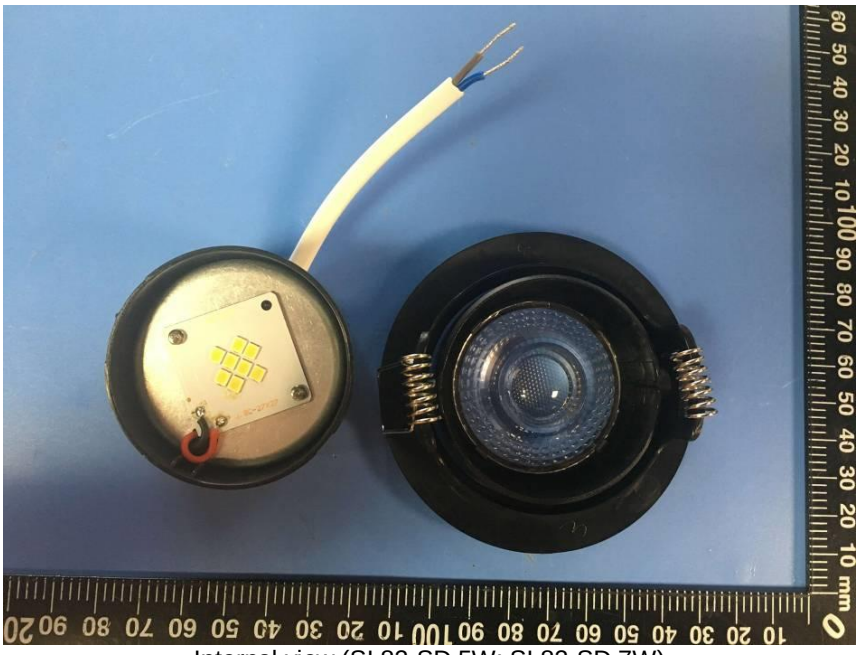


SL82-SD 5W; SL82-SD 7W

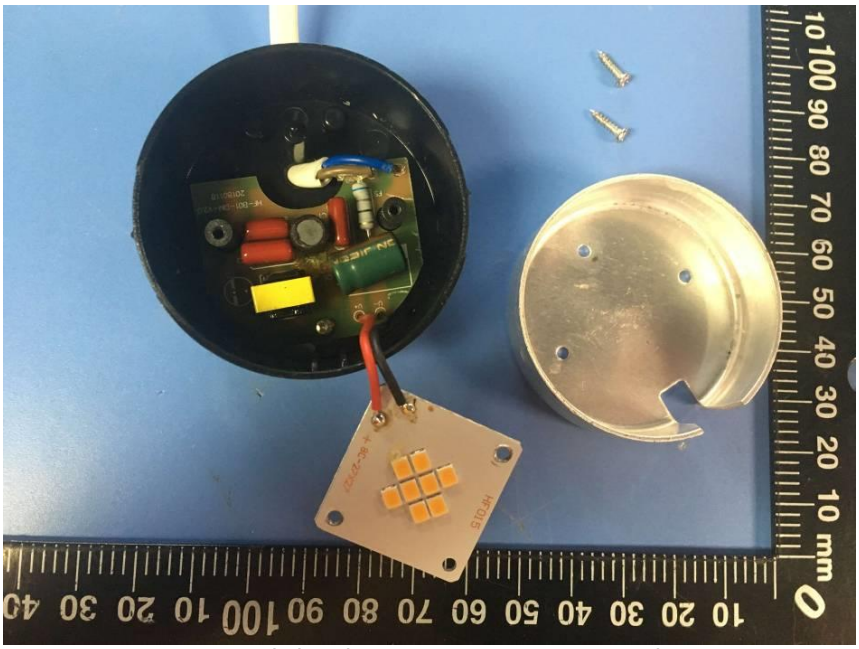


SL82-SD 5W; SL82-SD 7W

Appendix 7 - Photographs

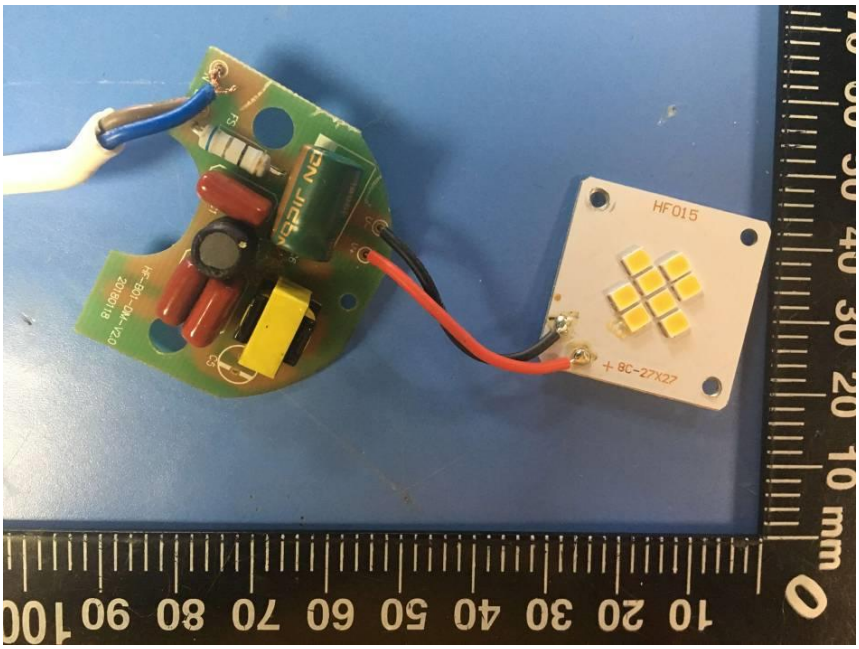


Internal view (SL82-SD 5W; SL82-SD 7W)

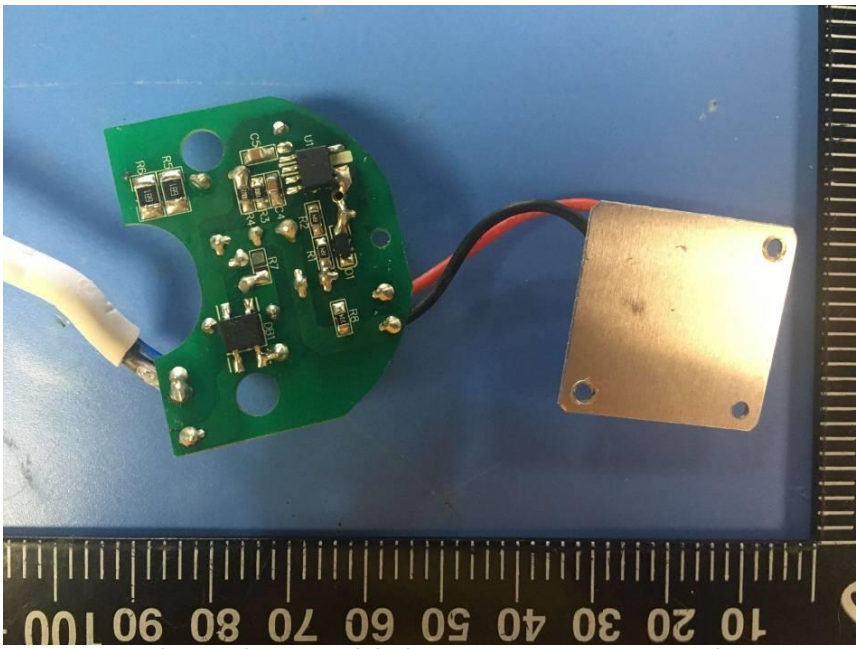


Internal view (SL82-SD 5W; SL82-SD 7W)

Appendix 7 - Photographs

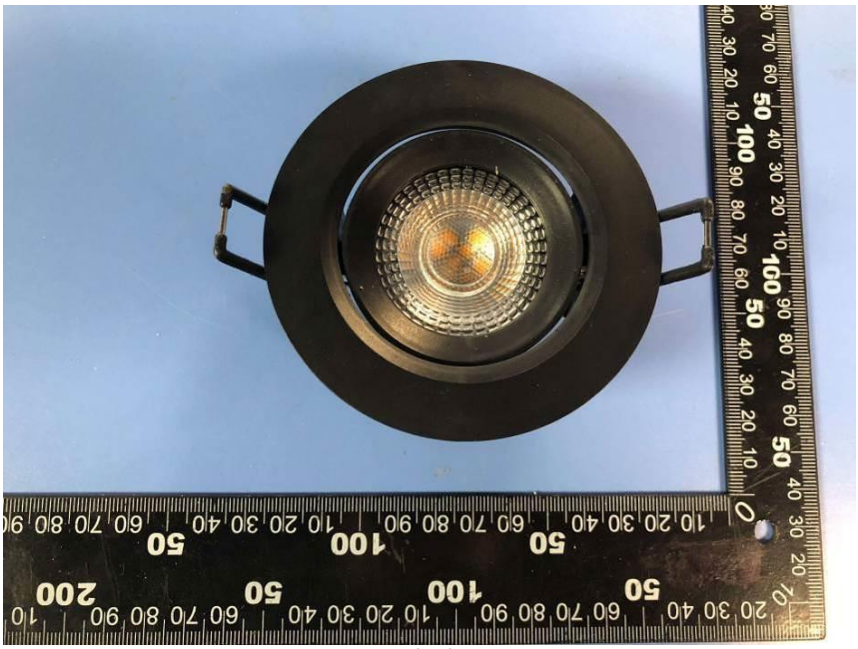


Driver and LED module (SL82-SD 5W; SL82-SD 7W)

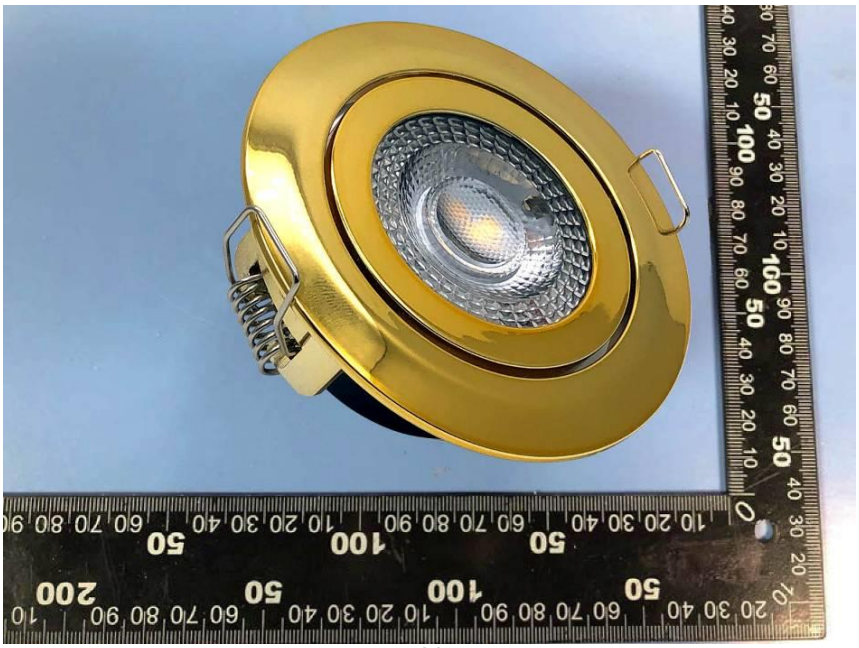


Driver and LED module (SL82-SD 5W; SL82-SD 7W)

Appendix 7 - Photographs

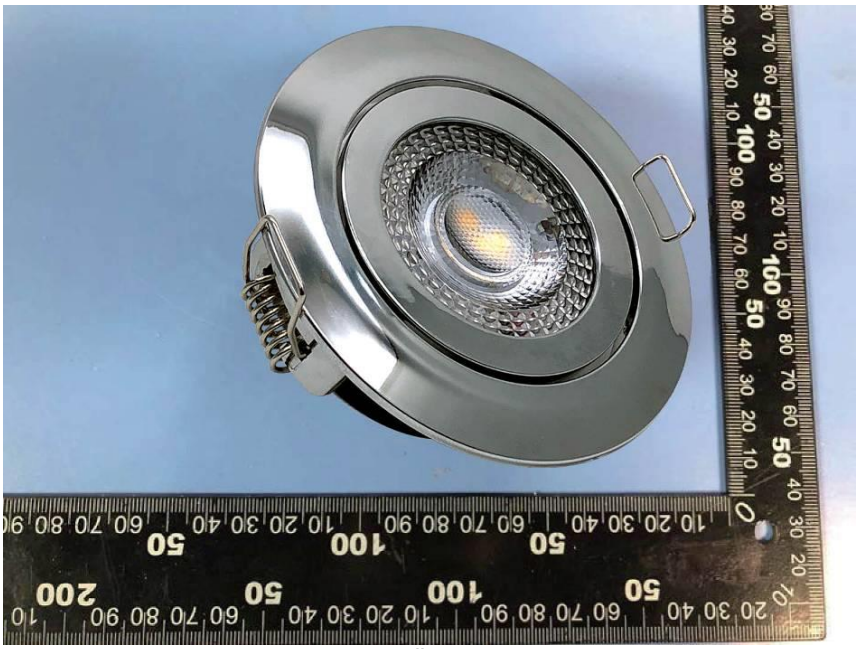


Black



Golden

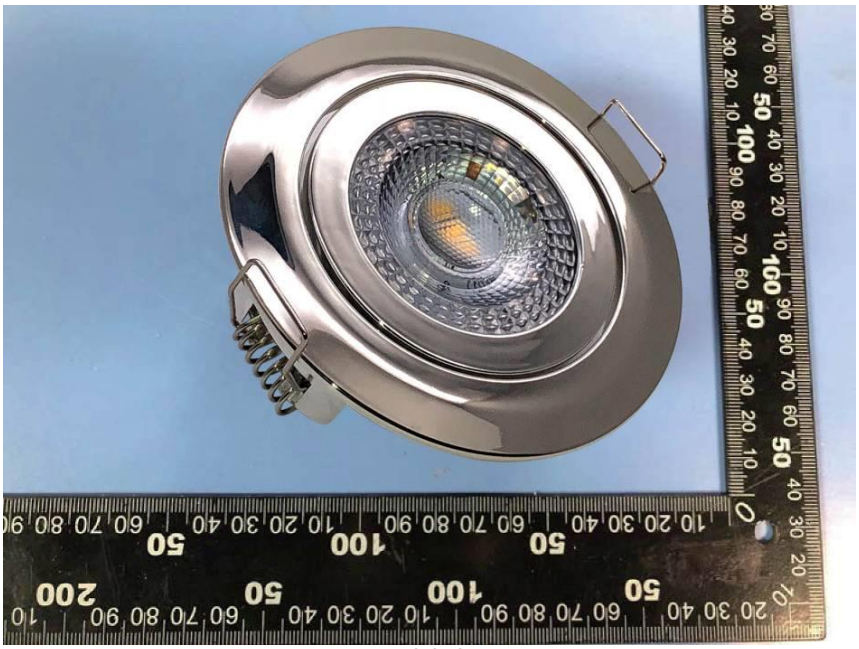
Appendix 7 - Photographs



Silver

Bronze

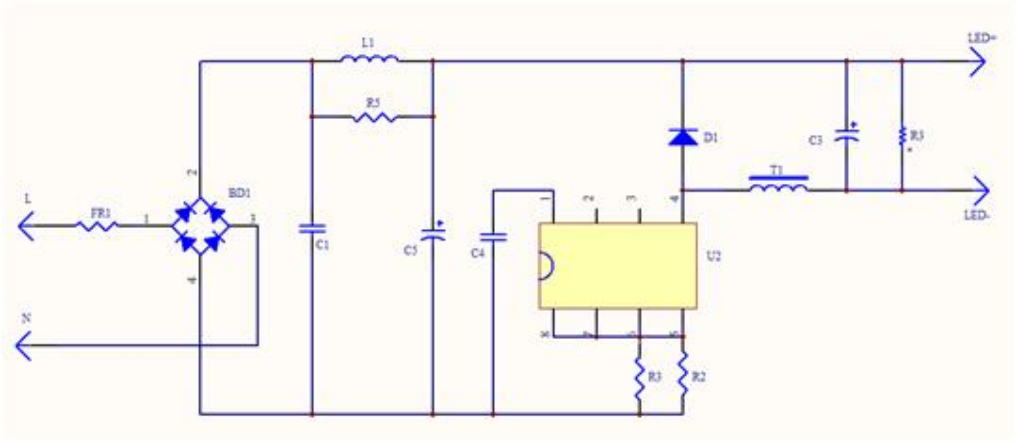
Appendix 7 - Photographs



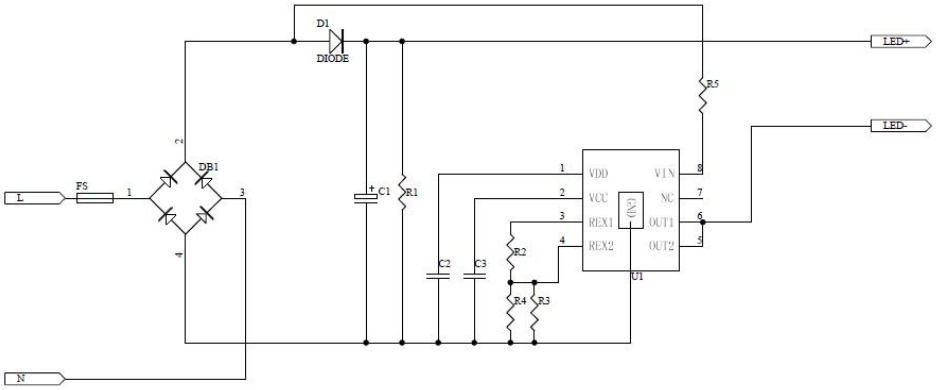
Nickel

Appendix 7 - Photographs

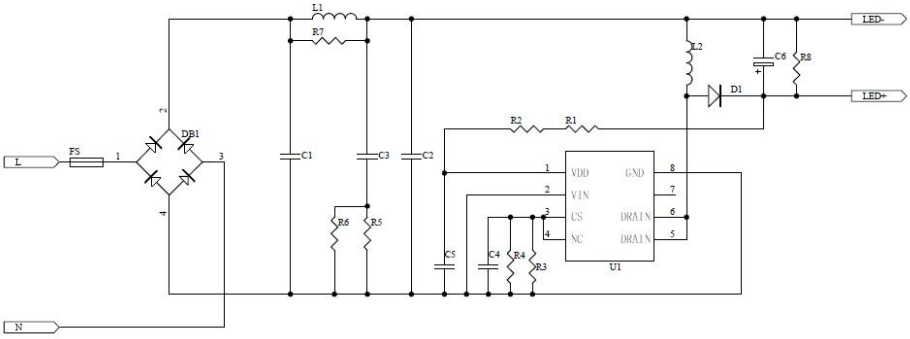
Circuit diagram and PCB layout



Circuit drawing of SL82 5W; SL82 7W

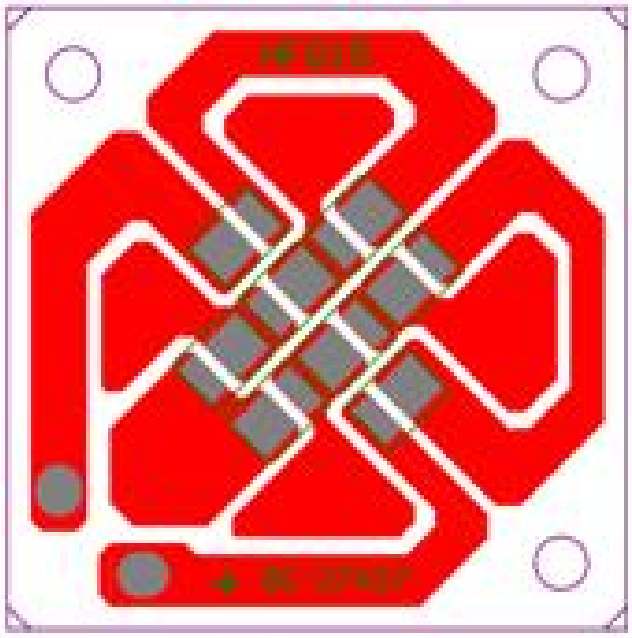


Circuit drawing of SL82-LD-3S 5W; SL82-LD-3S 7W

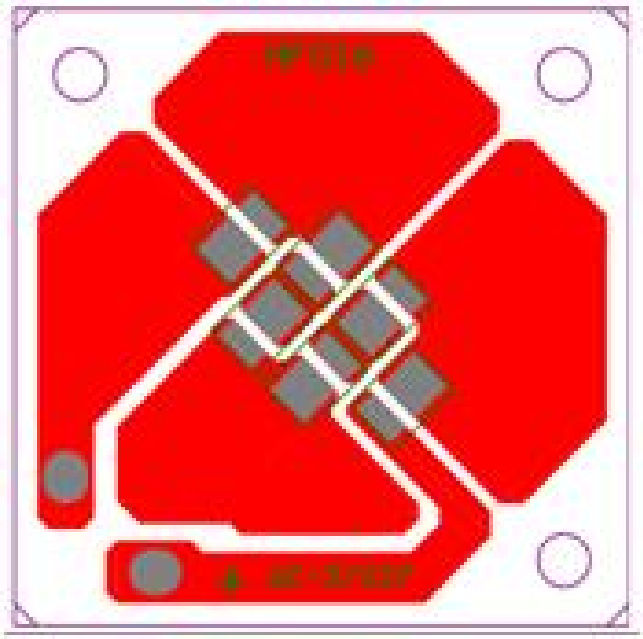


Circuit drawing of SL82-SD 5W; SL82-SD 5W

Appendix 7 - Photographs

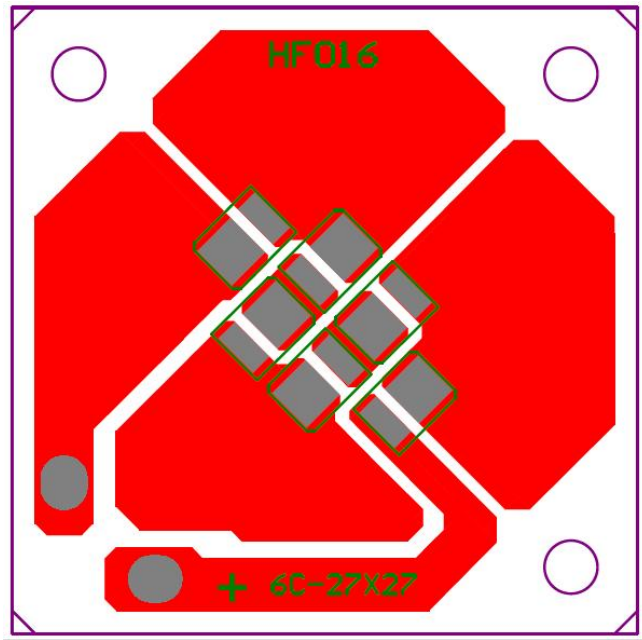


LED PCB of SL82 5W; SL82-LD-3S 5W; SL82-LD-3S 7W

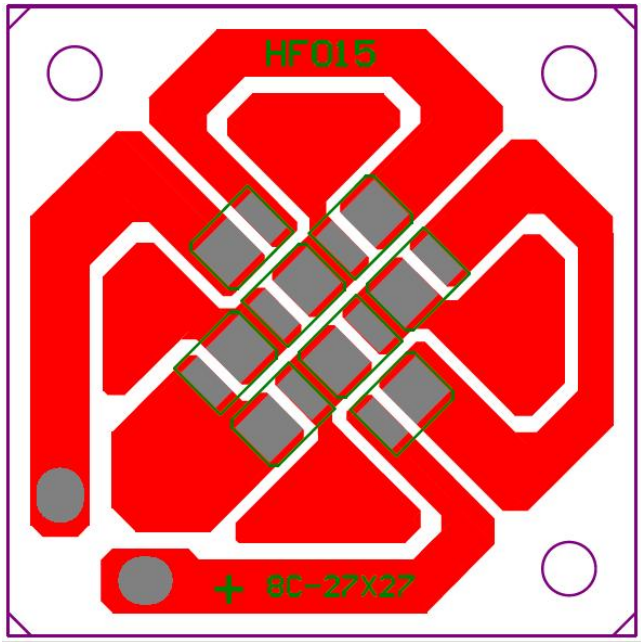


LED PCB of SL82 7W

Appendix 7 - Photographs

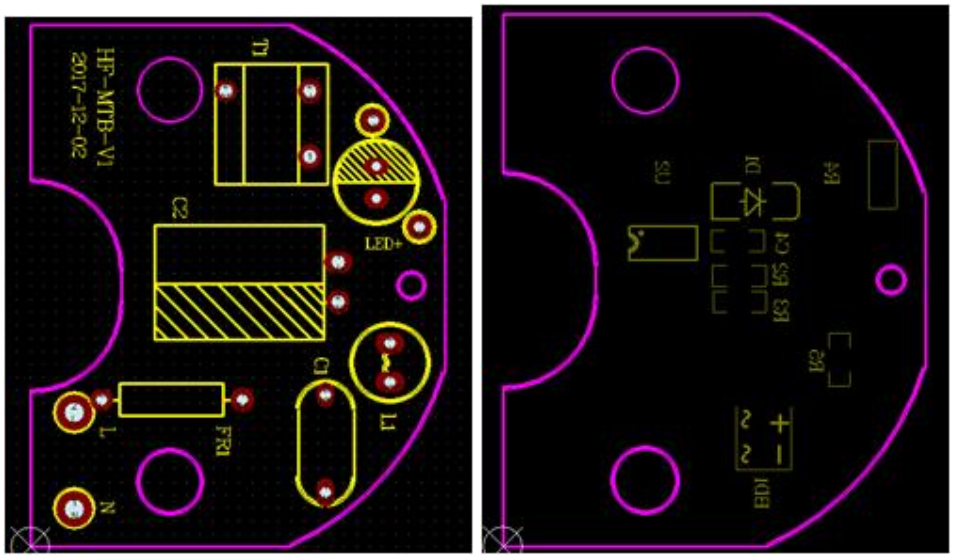


LED PCB of SL82-SD 5W

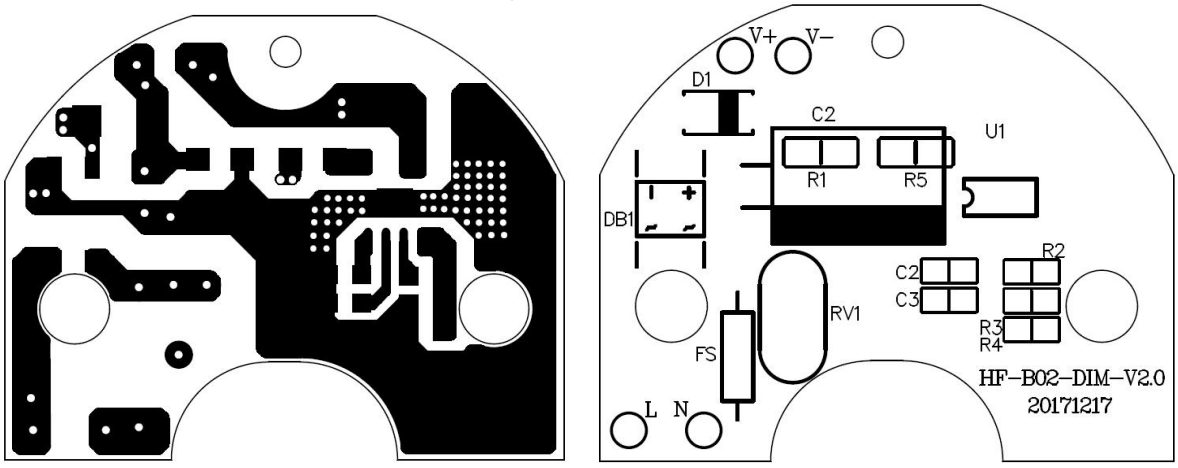


LED PCB of SL82-SD 7W

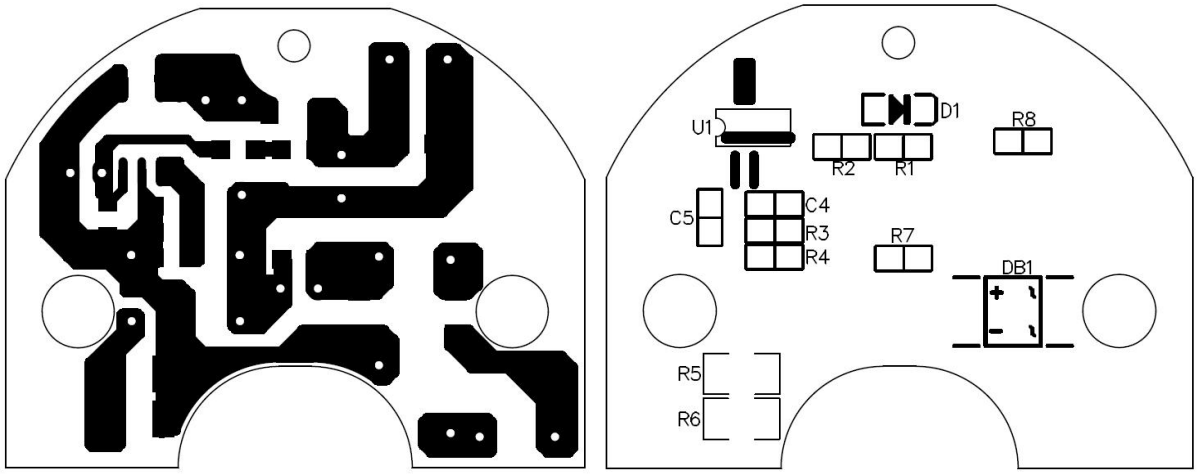
Appendix 7 - Photographs



Driver PCB layout for SL82 5W; SL82 7W



Driver PCB layout for SL82-LD-3S 5W; SL82-LD-3S 7W



Driver PCB layout for SL82-SD 5W; SL82-SD 7W