TEST REPORT
IEC 60598-2-1
Luminaires
Part 2: Particular requirements
Section 1: Fixed general purpose luminaires

Report Number. ..... :	**NBES211200638401**
Date of issue ..... :	**2022-03-15**
Total number of pages ..... :	**48**
Name of Testing Laboratory preparing the Report ..... :	SGS-CSTC Standards Technical Services Co., Ltd. Ningbo Branch
Applicant's name..... :	Zhejiang Summerside Sanitary Ware Technology Co., Ltd
Address..... :	49 Chengnan Road, Longyou Economic Development Zone, Donghua Street, Longyou, Quzhou, Zhejiang, China
Test specification:	
Standard ..... :	IEC 60598-2-1:2020 used in conjunction with IEC 60598-1:2020
Test procedure ..... :	SGS-CSTC
Non-standard test method ..... :	N/A
TRF template used ..... :	IECEE OD-2020-F1:2020, Ed.1.3
Test Report Form No. ..... :	IEC60598_2_1H
Test Report Form(s) Originator.... :	Intertek Semko AB
Master TRF..... :	Dated 2021-05-21

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.

Test item description .....:	Fixed Luminaire (LED Luminaire)
Trade Mark(s) .....:	SUMMERSIDE / KODA
Manufacturer .....:	Same as applicant
Model/Type reference .....:	See Page 6
Ratings .....:	220 V - 240 V; 50 Hz / 60 Hz; Max.110 W; IP44; Class II; Ta: 30 ℃

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

☒	**CB Testing Laboratory:**	SGS-CSTC Standards Technical Services Co., Ltd. Ningbo Branch	
Testing location/ address .....:		No.1177, Lingyun Road, Hi-Tech Zone, Ningbo, Zhejiang, China	
Tested by (name, function, signature) .....:		Ruby Yu, PE	Ruby Yu
Approved by (name, function, signature) ..:		Leo Du, Reviewer	Leo Du
☐	**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):

1. Attachment A – European group differences (1 page)
2. Attachment B – The requirement of EN 62031 (4 pages)
3. Attachment C – The requirement of EN 61347-2-11 used in conjunction with EN 61347-1 (8 pages)
4. Attachment D – Photo documentation (30 pages)

Summary of testing:

Tests performed (name of test and test clause):	**Testing location:**
Full tests except for IEC/TR 62778	SGS-CSTC Standards Technical Services Co., Ltd. Ningbo Branch No.1177, Lingyun Road, Hi-Tech Zone, Ningbo, Zhejiang, China
IEC/TR 62778	SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. 588 West Jindu Road, Xinqiao, Songjiang, 201612 Shanghai, China

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

1. EU Group Differences: Yes
2. EU Special National Conditions: No
3. EU A-deviations: No

☒ **The product fulfils the requirements of**

EN IEC 60598-1:2021

EN IEC 60598-2-1:2021

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.

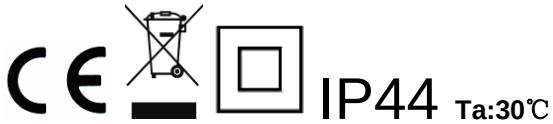
☒ **Statement not required by the standard used for type testing**

(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.

H-1085F50L60XTRSF
220 V - 240 V 50 Hz / 60 Hz LED 60 W
Defogger: 50 W



Manufacturer: Zhejiang Summerside Sanitary Ware Technology Co., Ltd
Postal address: 49 Chengnan Road, Longyou Economic Development Zone, Donghua Street, Longyou, Quzhou, Zhejiang, China
Importer name:
Postal address:

Information on the packaging：

Terminal block not included. Installation must be performed by a qualified person.

User manual:

1. For type Y attachments:

"if the external flexible cable or cord of this luminaire is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid a hazard. "

2. For non-user replaceable light sources:

"The light source contained in this luminaire shall only be replaced by the manufacturer or

his service agent or a similar qualified person.

3. Luminaires which are other than ordinary, provided with a PVC supply cord, shall be provided with information about the intended use:

"For indoor use only".

Note 1: The height of graphical symbols shall not be less than 5 mm, and the height of letters and numerals shall not be less than 2 mm. The height of WEEE symbol shall not be less than 7 mm.

Note 2: Other models are same as the above example except for model name, appearance and rated power.

Note 3: As declared by the applicant, the importer (and manufacturer, if it is different)’s name, registered trade name or registered trade mark and the postal address will be marked on the products before being place on the market. The contact details shall be in a language easily understood by end-users and market surveillance authorities.

Note 4: Marking on the packaging or in a document accompanying the electrical equipment is only acceptable if it is not possible to place such markings on the product.

Test item particulars .....:	
Classification of installation and use.....:	Fixed; normal use
Supply Connection .....:	Supply cord with plug or Supply cord
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..... :	2021-12-31
Date (s) of performance of tests ..... :	2021-12-31 to 2022-01-24

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

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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)..... : Same as applicant

General product information and other remarks:

The products were LED mirror for indoor use only, IP44, Class II. LED modules were used as light source.

Model/Type reference: H-abcdefgh
"H" stands for the abbreviation of client;
"a" could be 01-3999, stand for the shape of mirror (regular and irregular);
"b" could be F11-F50 or blank, stands for the power of Defogger, from 11 W to 50W, blank=no Defogger;
"c" could be L01-L60, stand for the power of LED strip, from 1W to 60 W;
"d" could be X or blank, X= with clock, blank= no clock;
"e" could be T or Blank, T=with touch switch, blank =without touch switch;
"f" could be R or Blank, R=with infrared sensor switch, blank = without infrared sensor switch;
"g" could be S or Blank, S=with mechanical switch, blank = without mechanical switch;
"h" could be cable plug. F=with cable plug, blank =without cable plug;

Example:
Model: H-190F50L60XTRSF, with 50W Defogger, with 60W led strip, with clock, with touch switch, with infrared sensor and mechanical switch, with cable plug, total power is max.110W.
Model: H-1009L6T, with 6 W LED strip, with touch switch, total power is max.6 W.

They shared same construction, circuit diagram except shape, power, appearance, size, with/without clock, with/without touch switch, with/without infrared sensor switch, with/without mechanical switch, with/without defogger and LED drivers.

The additional models were the same as the above models except for model names.
Details see below:

Additional model	Maximum rated power (W)	Size (mm)	Corresponding to the above model
BR 8045 8704 S	8	450*800	H-1280L8S
BR 7080 8700 S	15	800*700	H-1282L15S
BR 70100 8701 S	15	1000*700	H-1284L15S
BR 70120 8702 S	20	1200*700	H-1285L20S
BR 70140 8703 S	20	1400*700	H-1286L20S
BR 7090 8711 S	70	900*700	H-1287F50L20S
BR 7075 8710 S	55	700*750	H-1288F40L15S
BT 0075 8712 S	50	750*750	H-2289F30L20S
980.835020	8	500*700	H-1293L8T
980.837020	8	700*700	H-1294L8T
980.839020	8	900*700	H-1295L8T
980.831120	8	1100*700	H-1296L8T
980.835021	15	500*700	H-1297L15T
980.837021	15	700*700	H-1298L15T
980.839021	20	900*700	H-1299L20T
980.831121	20	1100*700	H-1300L20T
980.831421	20	1400*700	H-1301L20T
S17-FSP06-700X600EK	15	600*700	H-1302L15T
S17-FSP08-700X700EK	15	700*700	H-1303L15T
S17-FSP10-700X800EK	15	800*700	H-1304L15T
S17-FSP12-700X900EK	20	900*700	H-1305L20T
S17-FSP14-700X1000EK	20	1000*700	H-1306L20T
S17-FSP20-700X1200EK	20	1200*700	H-1307L20T
FEENS2170EK	20	700*700	H-2291L20T
980.836024	15	600*600	H-2292L15T

980.836023	15	600*800	H-1308L15R
980.837023	15	700*900	H-1309L15R
980.835022	15	500*700	H-1310L15XT
980.837022	15	700*700	H-1311L15XT
980.839022	20	900*700	H-1312L20XT
980.831122	20	1100*700	H-1313L20XT
1162275-120	9	1200*500	H-1093L9
1162275-100	9	1000*500	H-1094L9
1162275-90	9	900*500	H-1095L9
1162275-80	9	800*500	H-1096L9
1162275-60	9	600*500	H-1097L9
1162258	15	800*600	H-1086L15
1162261-60	15	600*500	H-1087L15
1162261-80	15	800*500	H-1088L15
1162261-90	15	900*500	H-1089L15
1162261-100	15	1000*500	H-1090L15
1162261-120	15	1200*500	H-1091L15

After review, model H-1085F50L60XTRSF was selected to perform full test according to EN IEC 60598-2-1:2021 used in conjunction with EN IEC 60598-1:2021.
Tests of 1.12 (8.2.7) were performed on model H-1085F50L60XTRS.
Tests of 1.12(12.4.1), 1.13(9.2.0, 9.2.5), 1.14(10.2.2) were performed on model H-1009L6T.
Test of 1.12(Tc point of 12.4.1) was performed on model H-1085F50L60XTRSF (with SNP60-12VFP).
Clock, touch switch 1, touch switch 2, touch switch 3, touch switch 4 and infrared sensor switch were performed the tests according to EN 61347-2-11: 2001 + A1:2019 used in conjunction with EN 61347-1:2015.
The LED module of H-1085F50L60XTRSF was performed the tests according to EN 62031:2008 + A1:2013 + A2:2015.
Model H-1085F50L60XTRSF was classified as RG1 at 200 mm according to IEC/TR 62778:2014.
The submitted appliances were found to be in compliance with EMF requirement of EN 62493:2015 according to the clause 4.2.2, no tests were necessary.

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.4 (0)	**GENERAL TEST REQUIREMENTS**		P
1.4 (0.3)	More sections applicable .....:	Yes ☐ No ☒ Section/s:	—
1.4 (0.5)	Components	(see Annex 1)	—
1.4 (0.7)	**Information for luminaire design in light sources standards**		—
1.4 (0.7.2)	Light source safety standard .....:	EN 62031	—
	Luminaire design in the light source safety standard		P
1.5 (2)	**CLASSIFICATION OF LUMINAIRES**		P
1.5 (2.2)	Type of protection .....:	Class II	P
1.5 (2.3)	Degree of protection .....:	IP44	—
1.5 (2.4)	Luminaire suitable for direct mounting on normally flammable surfaces .....:	Yes ☒ No ☐	—
1.5 (2.5)	Luminaire for normal use .....:	Yes ☒ No ☐	—
	Luminaire for rough service .....:	Yes ☐ No ☒	—
1.6 (3)	**MARKING**		P
1.6 (3.2)	Mandatory markings		P
	Position of the marking		P
	Format of symbols/text		P
1.6 (3.3)	Additional information		P
	Language of instructions		P
1.6 (3.3.1)	Combination luminaires		N/A
1.6 (3.3.2)	Nominal frequency in Hz		P
1.6 (3.3.3)	Operating temperature		P
1.6 (3.3.5)	Wiring diagram		N/A
1.6 (3.3.6)	Special conditions		N/A
1.6 (3.3.7)	Metal halide lamp luminaire – warning		N/A
1.6 (3.3.8)	Limitation for semi-luminaires		N/A
1.6 (3.3.9)	Power factor and supply current		P
1.6 (3.3.10)	Suitability for use indoors		P
1.6 (3.3.11)	Luminaires with remote control		N/A
1.6 (3.3.12)	Clip-mounted luminaire – warning		N/A
1.6 (3.3.13)	Specifications of protective shields		N/A
1.6 (3.3.14)	Symbol for nature of supply		P

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.6 (3.3.15)	Rated current of socket outlet		N/A
1.6 (3.3.16)	Rough service luminaire		N/A
1.6 (3.3.17)	Mounting instruction for type Y, type Z and some type X attachments	Type Y	P
1.6 (3.3.18)	Non-ordinary luminaires with PVC cable	For indoor use only	P
1.6 (3.3.19)	Protective conductor current in instruction if applicable		N/A
1.6 (3.3.20)	Provided with information if not intended to be mounted within arm's reach		N/A
1.6 (3.3.21)	Non replaceable and non-user replaceable light sources information provided	Non-user replaceable	P
1.6 (3.3.22)	Controllable luminaires, classification of insulation provided		N/A
1.6 (3.3.23)	Luminaires without control gear provided with necessary information for selection of appropriate component		N/A
1.6 (3.3.24)	If not supplied with terminal block, information on the packaging		P
1.6 (3.3.25)	Luminaires employing light sources emitting UV on mains wiring, information provided		N/A
1.6 (3.3.26)	Wall mounted luminaire using external flexible cable or cord longer than 0.3 m, information provided		P
1.6 (3.4)	Test with water		P
	Test with hexane		P
	Legible after test		P
	Label attached		P
1.7 (4)	**CONSTRUCTION**		P
1.7 (4.2)	Components replaceable without difficulty		P
1.7 (4.3)	Wireways smooth and free from sharp edges		P
1.7 (4.4)	**Lamp holders**		**N/A**
1.7 (4.4.1)	Integral lamp holder		N/A
1.7 (4.4.2)	Wiring connection		N/A
1.7 (4.4.3)	Lamp holder for end-to-end mounting		N/A
1.7 (4.4.4)	Positioning		N/A
	- pressure test (N) .....:		—
	After test the lamp holder comply with relevant standard sheets and show no damage		N/A

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	After test on single-capped lamp holder the lamp holder has not moved from its position and show no permanent deformation		N/A
	- bending test (N) .....:		—
	After test the lamp holder has not moved from its position and show no permanent deformation		N/A
1.7 (4.4.5)	Peak pulse voltage		N/A
1.7 (4.4.6)	Centre contact		N/A
1.7 (4.4.7)	Parts in rough service luminaires resistant to tracking		N/A
1.7 (4.4.8)	Lamp connectors		N/A
1.7 (4.4.9)	Caps and bases correctly used		N/A
1.7 (4.4.10)	Light source for lamp holder or connection according IEC 60061 not connected another way		N/A
1.7 (4.5)	**Starter holders**		**N/A**
	Starter holder in luminaires other than class II		N/A
	Starter holder class II construction		N/A
1.7 (4.6)	**Terminal blocks**		**N/A**
	Tails		N/A
	Unsecured blocks		N/A
1.7 (4.7)	**Terminals and supply connections**		**P**
1.7 (4.7.1)	Contact to metal parts		P
1.7 (4.7.2)	Test 8 mm live conductor		N/A
	Test 8 mm earth conductor		N/A
1.7 (4.7.3)	Terminals for supply conductors		P
1.7 (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
1.7 (4.7.4)	Terminals other than supply connection		P
1.7 (4.7.5)	Heat-resistant wiring/sleeves		N/A
1.7 (4.7.6)	Multi-pole plug		N/A
	- test at 30 N		N/A

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.7 (4.8)	**Switches**		**P**
	- adequate rating		P
	- adequate fixing		P
	- polarized supply		N/A
	- compliance with IEC 61058-1 for electronic switches		P
1.7 (4.9)	**Insulating lining and sleeves**		**P**
1.7 (4.9.1)	Retainment		P
	Method of fixing.....:	Heat-shrinkable tube	P
1.7 (4.9.2)	Insulated linings and sleeves:		P
	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
1.7 (4.10)	**Double or reinforced insulation**		**P**
1.7 (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
1.7 (4.10.2)	Assembly gaps:		P
	- not coincidental		P
	- no straight access with test probe		P
1.7 (4.10.3)	Retainment of insulation:		P
	- fixed		P
	- unable to be replaced; luminaire inoperative		P
	- sleeves retained in position		P
	- lining in lamp holder		N/A
1.7 (4.10.4)	Protective impedance device		P
	Basic and supplementary insulation bridged by resistor(s) or appropriate capacitor		P
	Double or reinforced insulation bridged by at least two separate resistors in series or appropriate capacitor(s)		P
	Capacitors comply with IEC 60384-14		P
	Resistors comply with test (a) in 14.2 of IEC 60065		N/A
1.7 (4.11)	**Electrical connections and current-carrying parts**		**P**

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.7 (4.11.1)	Contact pressure		P
1.7 (4.11.2)	Screws:		N/A
	- self-tapping screws		N/A
	- thread-cutting screws		N/A
1.7 (4.11.3)	Screw locking:		N/A
	- spring washer		N/A
	- rivets		N/A
1.7 (4.11.4)	Material of current-carrying parts		P
1.7 (4.11.5)	No contact to wood or mounting surface		P
1.7 (4.11.6)	Electro-mechanical contact systems		N/A
1.7 (4.12)	**Screws and connections (mechanical) and glands**		**P**
1.7 (4.12.1)	Screws not made of soft metal		P
	Screws of insulating material		N/A
	Torque test: torque (Nm); part.....:	0,5; Fixed electrical box	P
	Torque test: torque (Nm); part.....:		N/A
	Torque test: torque (Nm); part.....:		N/A
1.7 (4.12.2)	Screws with diameter < 3 mm screwed into metal		N/A
1.7 (4.12.4)	Locked connections:		N/A
	- fixed arms; torque (Nm).....:		N/A
	- lamp holder; torque (Nm).....:		N/A
	- push-button switches; torque 0,8 Nm.....:		N/A
1.7 (4.12.5)	Screwed glands; force (Nm) .....:		N/A
1.7 (4.13)	**Mechanical strength**		**P**
1.7 (4.13.1)	Impact tests:		P
	- fragile parts; energy (Nm).....:	Glass; 0,2	P
	- other parts; energy (Nm).....:	Enclosure; 0,35	P
	1) live parts		P
	2) linings		N/A
	3) protection		P
	4) covers		P
1.7 (4.13.2)	Metal parts have adequate mechanical strength		P
1.7 (4.13.3)	Straight test finger		P
1.7 (4.13.4)	Rough service luminaires		N/A
	- IP54 or higher		N/A
	a) fixed		N/A

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	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
1.7 (4.13.6)	Tumbling barrel		N/A
1.7 (4.14)	**Suspensions, fixings and means of adjusting**		**P**
1.7 (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
1.7 (4.14.2)	Load to flexible cables		N/A
	Mass (kg) .....:		—
	Stress in conductors (N/mm²) .....:		N/A
	Mass (kg) of semi-luminaire .....:		N/A
	Bending moment (Nm) of semi-luminaire .....:		N/A
1.7 (4.14.3)	Adjusting devices:		N/A
	- flexing test; number of cycles.....:		N/A
	- strands broken .....:		N/A
	- electric strength test afterwards		N/A
1.7 (4.14.4)	Telescopic tubes: cords not fixed to tube; no strain on conductors		N/A
1.7 (4.14.5)	Guide pulleys		N/A
1.7 (4.14.6)	Strain on socket-outlets		N/A
1.7 (4.15)	**Flammable materials**		**P**
	- glow-wire test 650°C .....:	See Test Table 1.15 (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

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	- electronic circuits exempted		N/A
1.7 (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
1.7 (4.16)	**Luminaires for mounting on normally flammable surfaces**		P
	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
1.7 (4.16.1)	Lamp control gear spacing:		N/A
	- spacing 35 mm		N/A
	- spacing 10 mm		N/A
1.7 (4.16.2)	Thermal protection:		P
	- in lamp control gear		P
	- external		N/A
	- fixed position		N/A
	- temperature marked lamp control gear		P
1.7 (4.16.3)	Design to satisfy the test of 12.6	(see clause 12.6)	N/A
1.7 (4.17)	**Drain holes**		**P**
	Clearance at least 5 mm		P
1.7 (4.18)	**Resistance to corrosion**		**P**
1.7 (4.18.1)	- rust-resistance		P
1.7 (4.18.2)	- season cracking in copper		P
1.7 (4.18.3)	- corrosion of aluminium		P
1.7 (4.19)	Ignitors compatible with ballast		N/A
1.7 (4.20)	Rough service vibration		N/A
1.7 (4.21)	**Protective shield**		**N/A**
1.7 (4.21.1)	Shield fitted if tungsten halogen lamps or metal halide lamps		N/A
	Shield of glass if tungsten halogen lamps		N/A
1.7 (4.21.2)	Particles from a shattering lamp not impair safety		N/A
1.7 (4.21.3)	No direct path		N/A
1.7 (4.21.4)	Impact test on shield		N/A
	Glow-wire test on lamp compartment.....:	See Test Table 1.15 (13.3.2)	N/A

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.7 (4.22)	Attachments to lamps not cause overheating or damage		N/A
1.7 (4.23)	Semi-luminaires comply Class II		N/A
1.7 (4.24)	**Photobiological hazards**		**P**
1.7 (4.24.1)	No excessive UV radiation if tungsten halogen lamps and metal halide lamps (Annex P)		N/A
1.7 (4.24.2)	Retinal blue light hazard		P
	Class of risk group assessed according to IEC/TR 62778 ..... :	RG1	—
	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
1.7 (4.25)	**Mechanical hazard**		**P**
	No sharp point or edges		P
1.7 (4.26)	**Short-circuit protection**		**N/A**
1.7 (4.26.1)	Adequate means of uninsulated accessible SELV / PELV parts		N/A
1.7 (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
1.7 (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
1.7 (4.28)	**Fixing of thermal sensing control**		**N/A**
	Not plug-in or easily replaceable type		N/A

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	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
1.7 (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
1.7 (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		N/A
1.7 (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
1.7 (4.31.1)	SELV or PELV circuits		P
	Used SELV/PELV source		P
	Voltage ≤ ELV		P
	Insulating of SELV/PELV circuits from LV supply		P
	Insulating of SELV/PELV circuits from other non SELV/PELV circuits		N/A
	Insulating of SELV/PELV circuits from FELV		N/A
	Insulating of SELV/PELV circuits from other SELV/PELV circuits		N/A
	SELV/PELV circuits insulated from accessible parts according Table X.1		P
	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

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.7 (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 does not have protective conductor contact		N/A
1.7 (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		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
	- master luminaire provided with terminal for accessible conductive parts of slave luminaires		N/A
	- slave luminaire constructed as class I		N/A
1.7 (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
1.6 (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
1.6 (4.34)	**Electromagnetic fields (EMF)**		P
	No harmful electromagnetic fields		P

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.6 (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
1.6 (4.36)	**Track-mounted luminaires**		N/A
	Test in accordance with Annex A of IEC60570:2003/AMD2:2019		N/A
1.8 (11)	**CREEPAGE DISTANCES AND CLEARANCES**		P
1.8 (11.2.1)	Impulse withstand category (Normal category II)	Category II ☐ Category III ☒	—
	Category III according Annex U		N/A
	Protected against pollution, reduced creepage and clearance according Annex P of IEC 61347-1		N/A
1.8 (11.2.2)	Creepage distances for frequency up to 30 kHz	See Test Table 1.7 (11.2) I	P
	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	See Test Table 1.7 (11.2) II	N/A
	- Requirements according IEC 60664-4 for controlgear not covered by IEC 61347	See Test Table 1.7 (11.2) II	N/A
1.8 (11.2.3)	Clearances for frequency up to 30 kHz	See Test Table 1.7 (11.2) I	P
	Clearances distances for frequency over 30 kHz:		N/A
	- Controlgear marked with U_P	See Test Table 1.7 (11.2) II	N/A
	- Requirements according IEC 60664-4 for controlgear not covered by IEC 61347	See Test Table 1.7 (11.2) II	N/A
1.9 (7)	**PROVISION FOR EARTHING**		N/A
1.9 (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

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	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
1.9 (7.2.2 + 7.2.3)	Protective earth continuity in joints, etc.		N/A
1.9 (7.2.4)	Locking of clamping means		N/A
	Compliance with 4.7.3		N/A
1.9 (7.2.5)	Protective earth terminal integral part of connector socket		N/A
1.9 (7.2.6)	Protective earth terminal adjacent to mains terminals		N/A
1.9 (7.2.7)	Electrolytic corrosion of the protective earth terminal		N/A
1.9 (7.2.8)	Material of protective earth terminal		N/A
	Contact surface bare metal		N/A
1.9 (7.2.10)	Class II luminaire for looping-in		N/A
	Double or reinforced insulation to functional earth		N/A
1.9 (7.2.11)	Protective earthing core coloured green-yellow		N/A
	Length of earth conductor		N/A
1.9 (7.2.12)	PELV circuit connected to protective earth for functional purpose		N/A
1.10 (14)	**SCREW TERMINALS**		P
	Separately approved; component list	(see Annex 1)	P
	Part of the luminaire	(see Annex 3)	N/A
1.10 (15)	**SCREWLESS TERMINALS AND ELECTRICAL CONNECTIONS**		P
	Separately approved; component list.....:	(see Annex 1)	P
	Part of the luminaire .....:	(see Annex 4)	N/A
1.11 (5)	**EXTERNAL AND INTERNAL WIRING**		P
1.11 (5.2)	**Supply connection and external wiring**		**P**
1.11 (5.2.1)	Means of connection.....:	Supply cord with plug or Supply cord	P

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	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
1.11 (5.2.2)	Type of cable.....:	H03VVH2-F or H05VVH2-F	P
	Nominal cross-sectional area (mm²).....:	2 x 0,75	P
	Cables equal to IEC 60227 or IEC 60245		P
1.11 (5.2.3)	Type of attachment, X, Y or Z	Type Y	P
1.11 (5.2.5)	Type Z not connected to screws		N/A
1.11 (5.2.6)	Cable entries:		P
	- suitable for introduction		P
	- adequate degree of protection		P
1.11 (5.2.7)	Cable entries through rigid material have rounded edges		P
1.11 (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
1.11 (5.2.9)	Locking of screwed bushings		N/A
1.11 (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
1.11 (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

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Glands not used as anchorage		N/A
	Labyrinth type anchorages		N/A
1.11 (5.2.10.2)	Adequate cord anchorage for type Y and type Z attachment	Type Y	P
1.11 (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
1.11 (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
	- 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 30N		N/A
1.11 (5.2.11)	External wiring passing into luminaire		P
1.11 (5.2.12)	Looping-in terminals		N/A
1.11 (5.2.13)	Wire ends not tinned		P
	Wire ends tinned: no cold flow		N/A
1.11 (5.2.14)	Mains plug same protection	For indoor use only	P
	Class III luminaire plug		N/A
	No unsafe compatibility		N/A
1.11 (5.2.15)	Connectors for Class III luminaires (IEC 60603 or IEC 62680)		N/A
1.11 (5.2.16)	Appliance inlets (IEC 60320)		N/A
	Installation couplers (IEC 61535)		N/A
	Appliance inlet or connector systems (IEC 61984)		N/A

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.11 (5.2.17)	No standardized interconnecting cables properly assembled		N/A
1.11 (5.2.18)	Used plug in accordance with		P
	- IEC 60083		N/A
	- other standard		P
1.11 (5.3)	**Internal wiring**		**P**
1.11 (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 protective earth only		N/A
1.11 (5.3.1.1)	Internal wiring connected directly to fixed wiring		P
	Cross-sectional area (mm²) .....:	Min. 0,75	P
	Insulation thickness (mm) .....:	0,53	P
	Extra insulation added where necessary		N/A
1.11 (5.3.1.2)	Internal wiring connected to fixed wiring via internal current-limiting device		P
	Cross-sectional area (mm²) .....:	Min. 24 AWG	P
1.11 (5.3.1.3)	Double or reinforced insulation for class II		P
1.11 (5.3.1.4)	Conductors without insulation		N/A
1.11 (5.3.1.5)	SELV/PELV current-carrying parts		P
1.11 (5.3.1.6)	Insulation thickness other than PVC or rubber		N/A
1.11 (5.3.2)	Sharp edges etc.		P
	No moving parts of switches etc.		P
	Joints, raising/lowering devices		N/A
	Telescopic tubes etc.		N/A
	No twisting over 360°		P
1.11 (5.3.3)	Insulating bushings:		N/A
	- suitable fixed		N/A
	- material in bushings		N/A

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	- material not likely to deteriorate		N/A
	- cables with protective sheath		N/A
1.11 (5.3.4)	Joints and junctions effectively insulated		P
1.11 (5.3.5)	Strain on internal wiring		N/A
1.11 (5.3.6)	Wire carriers		N/A
1.11 (5.3.7)	Wire ends not tinned		P
	Wire ends tinned: no cold flow		N/A
1.11 (5.4)	**Test to determine suitability of conductors having a reduced cross-sectional area**		**P**
	Under test the temperature of the luminaire wiring insulation not exceed the limits stated in Table 12.2	(see Annex 2)	P
	No damage to luminaire wiring after test		P
1.12 (8)	**PROTECTION AGAINST ELECTRIC SHOCK**		P
1.12 (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 starter holders in portable and adjustable luminaires comply with double or reinforced insulation requirements		N/A
	Basic insulation only accessible under lamp or starter replacement		P
	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
1.12 (8.2.2)	Portable luminaire adjusted in most unfavourable position		N/A
1.12 (8.2.3.a)	Class II luminaire:		P
	- basic insulated metal parts not accessible during starter or lamp replacement		N/A

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	- basic insulation not accessible other than during starter or lamp replacement		P
	- glass protective shields not used as supplementary insulation		N/A
1.12 (8.2.3.b)	BC lamp holder of metal in class I luminaires shall be connected to protective earth		N/A
1.12 (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 if required		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
	Class III luminaire only for connection to SELV		N/A
	Class III luminaire not provided with means for protective earthing		N/A
1.12 (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
	One pole insulated if required		N/A
1.12 (8.2.4)	Portable luminaire has protection independent of supporting surface		N/A
1.12 (8.2.5)	Compliance with the standard test finger or relevant probe		P
1.12 (8.2.6)	Covers reliably secured		P
1.12 (8.2.7)	Luminaire other than below with capacitor $>$ 0,5 μF not exceed 50 V 1 min after disconnection	Max. 12,5 V	P

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Portable luminaire with capacitor > 0,1 μF (0.25) not exceed 34 V 1 s after disconnection		N/A
	Other luminaires with capacitor > 0,1 μF (0.25) with plug and track adaptors not exceed 60 V 5 s after disconnection	Max. 12 V	P
1.13 (12)	**ENDURANCE TEST AND THERMAL TEST**		P
1.13 (-)	If IP > IP 20 relevant test of (12.4), (12.5), (12.6) and (12.7) after (9.2) before (9.3) as specified in 1.14		—
1.13 (12.2)	**Selection of lamps and ballasts**		**—**
	Lamp used according Annex B	(Lamp used see Annex 2)	—
	Control gear if separate and not supplied	(Control gear used see Annex 2)	—
1.13 (12.3)	**Endurance test**		**P**
	a) mounting-position .....:	Fixed on the wall	—
	b) test temperature (°C).....:	40	—
	c) total duration (h) .....:	240	—
	d) supply voltage (V).....:	264	—
	d) if not equipped with control gear, constant voltage/current (V) or (A) .....:	—	—
1.13 (12.3.1d)	d) Class III luminaires powered via information technology communication cable:		N/A
	- voltage under normal operation (V)……...:	—	—
	- voltage under abnormal operation (V)……...:	—	—
	e) luminaire ceases to operate		—
	f) luminaire with constant light output function		N/A
1.13 (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
1.13 (12.4)	**Thermal test (normal operation)**	(see Annex 2)	P
1.13 (12.5)	**Thermal test (abnormal operation)**	(see Annex 2)	P
1.13 (12.6)	**Thermal test (failed lamp control gear condition):**		**N/A**

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.13 (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
1.13 (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
1.13 (12.7)	**Thermal test (failed lamp control gear in plastic luminaires):**		**N/A**
1.13 (12.7.1)	Luminaire without temperature sensing control		N/A
1.13 (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 Test Table 1.15 (13.2.1)	N/A

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.13 (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 Test Table 1.15 (13.2.1)	N/A
1.13 (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
1.13 (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:.....:	See Test Table 1.15 (13.2.1)	N/A

1.14 (9)	**RESISTANCE TO DUST AND MOISTURE**		P
1.14 (-)	If IP > IP 20 the order of tests as specified in clause 1.12		P
1.14 (9.2)	Tests for ingress of dust, solid objects and moisture:		P
	- classification according to IP.....:	IP44	—
	- mounting position during test.....:	Normal used position	—
	- fixing screws tightened; torque (Nm).....:	Two-thirds of that specified in the clause 1.7 (4.12.1)	—
	- tests according to clauses .....:	9.2.0 and 9.2.5	—
	- electric strength test afterwards		P
	a) no deposit in dust-proof luminaire		N/A
	b) no talcum in dust-tight luminaire		N/A
	c) no trace of water on current-carrying parts or on insulation where it could become a hazard		P

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	c.1) For luminaires without drain holes – no water entry		N/A
	c.2) For luminaires with drain holes – no hazardous water entry		P
	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)		N/A
	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)		P
	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
1.14 (9.3)	Humidity test 48 h		P

1.15 (10)	**INSULATION RESISTANCE AND ELECTRIC STRENGTH**		P
1.15 (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): See below		P
	SELV/PELV:		P
	- between current-carrying parts of different polarity:		N/A
	- between current-carrying parts and mounting surface .....:	> 500 MΩ	P
	- between current-carrying parts and metal parts of the luminaire.....:	> 500 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/PELV:		P
	- between live parts of different polarity.....:	> 500 MΩ	P
	- between live parts and mounting surface.....:	> 500 MΩ	P
	- between live parts and metal parts.....:	> 500 MΩ	P
	- between live parts of different polarity through action of a switch.....:		N/A

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts .....:	> 500 MΩ	P
	- Insulation bushings as described in Section 5 .....:		N/A
1.15 (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): See below		P
	SELV/PELV:		P
	- between current-carrying parts of different polarity:		N/A
	- between current-carrying parts and mounting surface .....:	500 V	P
	- between current-carrying parts and metal parts of the luminaire.....:	500 V	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.....:	1480 V	P
	- between live parts and mounting surface .....:	2960 V	P
	- between live parts and metal parts.....:	2960 V	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 .....:	1480 V	P
	- Insulation bushings as described in Section 5 .....:		N/A
1.15 (10.3)	Touch current (mA)…….:		N/A
	Protective conductor current (mA).....:	Max. 0,21 mA	P

1.16 (13)	**RESISTANCE TO HEAT, FIRE AND TRACKING**		P
1.16 (13.2.1)	Ball-pressure test.....:	See Test Table 1.16 (13.2.1)	P
1.16 (13.3.1)	Needle-flame test (10 s) .....:	See Test Table 1.16 (13.3.1)	P
1.16 (13.3.2)	Glow-wire test (650°C).....:	See Test Table 1.16 (13.3.2)	P

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.16 (13.4)	Proof tracking test (IEC 60112).....:	See Test Table 1.16 (13.4)	P

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict

1.8 (11.2)	**TABLE I: Creepage distances and clearances**							**P**
	Minimum distances (mm) for a.c. up to 30 kHz sinusoidal voltages							**P**
	Applicable part of IEC 60598-1 Table 11.1.A*, 11.1.B* and 11.2*							**P**
	Insulation type **	**Measured clearance**	**Required**		**Measured creepage**	**Required**		
			clearance	***Table**		**creepage**	***Table**	
Distance 1:	B	1)	1,5	11.1.B	1)	2,5	11.1.A	
Working voltage (V)..... :					240			—
PTI..... :					< 600 ☒ ≥ 600 ☐			—
Pulse voltage or U_P if applicable (kV) ..... :					N/A			—
Supplementary information: 1) Between live parts of different polarity: Min. Cl. = Cr. = 2,6 mm								
Distance 2:	S	2)	1,5	11.1.B	2)	2,5	11.1.A	
Working voltage (V)..... :					240			—
PTI..... :					< 600 ☒ ≥ 600 ☐			—
Pulse voltage or U_P if applicable (kV) ..... :					N/A			—
Supplementary information: 2) Between basic insulation and accessible parts: Min. Cl. = Cr. = 2,6 mm Between the outer surface of cable clamped by cord anchorage and accessible metal parts: Min. Cl. = Cr. = 2,6 mm								
Distance 3:	R	3)	3,0	11.1.B	3)	5,0	11.1.A	
Working voltage (V)..... :					240			—
PTI..... :					< 600 ☒ ≥ 600 ☐			—
Pulse voltage or U_P if applicable (kV) ..... :					N/A			—
Supplementary information: 3) Between live parts and supporting surface: Cl. = Cr. = 5,1 mm Between live parts and accessible parts: Cl. = Cr. = 5,1 mm								

** Insulation type: B – Basic; S – Supplementary; R – Reinforced. See also IEC 60598-1 Annex M.

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict

1.8 (11.2)	**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: N/A							
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: N/A							
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: N/A							

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

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict

1.16 (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)
Electrical box	See Annex 1	75	1,3
Defogger connector	See Annex 1	75	1,3
PCB	See Annex 1	125	1,4
Enclosure of relay	See Annex 1	75	1,3
Enclosure of touch switch	See Annex 1	75	1,4
Supplementary information: N/A			

1.16 (13.3.1)	**TABLE: Needle-flame test**				**P**
Object/ Part No./ Material	Manufacturer/ trademark	Duration of application of test flame (ta); (s)	Ignition of specified layer Yes/No	Duration of burning (tb) (s)	Verdict
LED board	See Annex 1	10	No	0	P
PCB	See Annex 1	10	No	0	P
DC Connector	FOSHAN XINMIN ELETRONIC TECHINOLOGY CO., LTD	10	No	0	P
Supplementary information: N/A					

1.16 (13.3.2)	**TABLE: Resistance to heat and fire - Glow wire tests**						**P**
Object/ Part No./ Material	**Manufacturer/ trademark**	**Glow wire test (°C)**					**Verdict**
		650		**750**		**850**	
		te	**ti**	**te**	**ti**		
Defogger connector	Dalian Lily Mirror Co., Ltd	0	0	—	—	—	P
Electrical box	See Annex 1	0	0	—	—	—	P
Heated - shrinkable tube	See Annex 1	0	0	—	—	—	P
Enclosure of relay	See Annex 1	0	0	—	—	—	P

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict

Enclosure of touch switch	See Annex 1	0	0	—	—	—	P
Close-end connector	See Annex 1	0	0	—	—	—	P
Glue	SHENZHN SMILE LIGHTING CO., LTD.	0	0	—	—	—	P
Ignition of the specified layer placed underneath the test specimen (Yes/No) ..... :							No
Supplementary information: N/A							

1.16 (13.4)	**TABLE: Proof tracking test**				**P**
Test voltage PTI .....:		175 V			—
Object/ Part No./ Material	Manufacturer/ trademark	Withstand 50 drops without failure on three places or on three specimens			Verdict
Defogger connector	Dalian Lily Mirror Co., Ltd	No flashover	No flashover	No flashover	P
Electrical box	See Annex 1	No flashover	No flashover	No flashover	P
Supplementary information:					

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 1	**TABLE: Critical components information**	P

Object / part No.	**Code**	**Manufacturer/ trademark**	**Type / model**	**Technical data**	**Standard**	**Mark(s) of conformity[1)]**
LED driver 1	B	Letaron Electronic Co., Ltd.	AED06-12VLS	Input: 220-240 V; 50/60 Hz; Output: DC 12 V; Max.500 mA / 6 W; Tc: 85 ℃; SELV	EN 61347-1 EN 61347-2-13 EN 62493	TUV SUD (Z1 065581 0304 Rev.01)
(Alternative)	D	Ningbo Snappy Optoelectronics Co., Ltd.	SNP6-12VF	Input: 200-240 V; 50/60 Hz; Output: 12VDC; Max.0,5 A / 6 W; Tc: 80 ℃;SELV	EN 61347-1 EN 61347-2-13 EN 62493	TUV Rheinland (R 50392596)
LED driver 2	B	Letaron Electronic Co., Ltd.	AED9-12VLS	Input: 220-240 V; 50/60 Hz; Output: DC 12 V; Max.750 mA / 9 W; Tc: 85 ℃; SELV	EN 61347-1 EN 61347-2-13 EN 62493	TUV SUD (Z1 065581 0304 Rev.01)
LED driver 3	D	Ningbo Snappy Optoelectronics Co., Ltd.	SNP8-12VL-1	Input: 200-240 V; 50/60 Hz; Output: 12 VDC; Max.0,67 A / 8 W; Tc: 75 ℃; SELV	EN 61347-1 EN 61347-2-13 EN 62493	TUV Rheinland (R 50249628)
(Alternative)	D	Ningbo Snappy Optoelectronics Co., Ltd.	SE8-12VL	Input: 200-240 V; 50/60 Hz; Output: 12 VDC; Max.0.67 A / 8 W; Ta: 45 °C; Tc: 75 °C; SELV	EN 61347-1 EN 61347-2-13 EN 62493	TUV Rheinland (R 50518882)
LED driver 4	B	Letaron Electronic Co., Ltd.	AED15-12VLSJ	Input: 220-240 V; 50/60 Hz; Output: DC 12 V; Max.1,25 A / 15 W; Tc: 85 ℃; SELV	EN 61347-1 EN 61347-2-13 EN 62493	TUV SUD (Z1 065581 0243 Rev.02)
(Alternative)	D	Ningbo Snappy Optoelectronics Co., Ltd.	SNP15-12VL	Input: 200-240 V; 50/60 Hz; Output: 12 VDC; Max.1,25 A / 15 W; Tc: 80 ℃; SELV	EN 61347-1 EN 61347-2-13 EN 62493	TUV Rheinland (R 50202847)

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict

(Alternative)	D	Ningbo Snappy Optoelectronics Co., Ltd.	SE15-12VF	Input: 200-240 V; 50/60 Hz; Output: 12 VDC; Max.1,25 A / 15 W; Ta: 45 °C; Tc: 85 °C; SELV	EN 61347-1 EN 61347-2-13 EN 62493	TUV Rheinland (R 50518846)
LED driver 5	B	Letaron Electronic Co., Ltd.	AED20-12VLSJ	Input: 220-240 V; 50/60 Hz; Output: DC 12 V; Max.1,66 A / 20 W; Tc: 85 ℃; IP20; SELV	EN 61347-1 EN 61347-2-13 EN 62493	TUV SUD (Z1 065581 0243 Rev.02)
(Alternative)	D	Ningbo Snappy Optoelectronics Co., Ltd.	SNP20-12VF-E	Input: 200-240 V; 50/60 Hz; Output: 12 VDC; Max.1,67 A / 20 W; Tc: 80 ℃; SELV	EN 61347-1 EN 61347-2-13 EN 62493	TUV Rheinland (R 50348869)
(Alternative)	D	Ningbo Snappy Optoelectronics Co., Ltd.	SS20-12VF	Input: 220-240 V; 50/60 Hz; Output: 12 VDC; Max.1,67 A / 20 W; Tc: 80 ℃; SELV	EN 61347-1 EN 61347-2-13 EN 62493	TUV Rheinland (AN 50460786)
(Alternative)	D	Ningbo Snappy Optoelectronics Co., Ltd.	SE20-12VF	Input: 200-240 V; 50/60 Hz; Output: 12 VDC; Max.1,65 A / 20 W; Ta: 45 °C; Tc: 85 °C; SELV	EN 61347-1 EN 61347-2-13 EN 62493	TUV Rheinland (R 50518846)
LED driver 6	B	Letaron Electronic Co., Ltd.	AED25-12VLSJ	Input: 220-240 V; 50/60 Hz; Output: DC 12 V; Max.2100 mA / 25 W; Tc: 85 ℃; SELV	EN 61347-1 EN 61347-2-13 EN 62493	TUV SUD (Z1A 065581 0179 Rev.01)
LED driver 7	B	Ningbo Snappy Optoelectronics Co., Ltd.	SE30-12VL	Input: 200-240 V; 50/60 Hz; Output: 12 VDC; Max.2,5 A / 30 W; Tc: 80 ℃; SELV	EN 61347-1 EN 61347-2-13 EN 62493	TUV Rheinland (R 50388243)

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict

LED driver 8	B	Letaron Electronic Co., Ltd.	AED36-12VLSJ	Input: 220-240 V; 50/60 Hz; Output: DC 12 V; Max.3000 mA / 36 W; Tc: 85 ℃; SELV	EN 61347-1 EN 61347-2-13 EN 62493	TUV SUD (Z1A 065581 0179 Rev.01)
LED driver 9	B	Letaron Electronic Co., Ltd.	AED48-12VLSTB-IP44	Input: 220-240 V; 50/60 Hz; Output: 12 VDC; Max.4 A / 48 W; Tc: 80 ℃; IP44; SELV	EN 61347-1 EN 61347-2-13 EN 62493	TUV SUD (Z1 065581 0292 Rev.03)
LED driver 10	B	Letaron Electronic Co., Ltd.	AED60-12VLSTB-IP44	Input: 220-240 V; 50/60 Hz; Output: 12 VDC; Max.5 A / 60 W; Tc: 80 ℃; IP44; SELV	EN 61347-1 EN 61347-2-13 EN 62493	TUV SUD (N8A 065581 0293 Rev.02)
(Alternative)	D	Ningbo Snappy Optoelectronics Co., Ltd.	SNP60-12VFP	Input: 200-240 V; 50/60 Hz; Output: 12 VDC; Max.5 A / 60 W; Tc: 90 ℃; IP44; SELV	EN 61347-1 EN 61347-2-13 EN 62493	TUV Rheinland (R 50412906)
Plug	B	Ningbo Jinting Nuclear Cable Co., Ltd.	FY001	250 V; 2,5 A; IP20	EN 50075	VDE (40036482)
(Alternative)	D	Ningbo Jinting Nuclear Cable Co., Ltd.	FY006A	250 V; 13 A	BS 1363-1	ASTA (1295)
Supply cord 1	B	Zhejiang Jinting Nuclear Cable Co.,Ltd.	H03VVH2-F	2 x 0,75 mm^2	EN 50525-2-11	VDE (40013419)
Supply cord 2	B	Zhejiang Jinting Nuclear Cable Co.,Ltd.	H05VVH2-F	2 x 1,0 mm^2	EN 50525-2-11	VDE (40013419)
Internal wire	C	DONGGUAN YANGDA ELECTRONIC TECHNOLOGY CO., LTD	1007	300 V; 80 ℃; 24 AWG	EN 60598-1 EN 60598-2-1	UL (E467966) + Tested with appliance
(Alternative)	C	SHENZEN DAYODA TECHNOLOGY CO., LTD	2464	300 V; 80 ℃; 22 AWG	EN 60598-1 EN 60598-2-1	Tested with appliance
(Alternative)	C	DONGGUAN TRIUMPHCABLE CO LTD	2468	300 V; 80 ℃; 22 AWG	EN 60598-1 EN 60598-2-1	UL (E249743) + Tested with appliance

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict

Defogger	B	Dalian Lily Mirror Co., Ltd	FWMP-*, FWMT-*(*=1-26)	220 V - 240 V; 50 Hz / 60 Hz; 220 W/M^2	EN 60335-1 EN 62233	SGS SHES15050 0258301HS C
Mechanical switch	B	Dongguan HUACONN Electronics Co., Ltd	HS8 series	AC 250 V; 12(4) A; T105/55	EN IEC 61058-1	VDE (40043123)
Touch switch 1	C	FOSHAN XINMIN ELETRONIC TECHINOLOGY CO., LTD	XM319-T-1	12 VDC; 2,5 A	EN 61347-2-11 EN 61347-1	Tested with appliance
Touch switch 2	C	WENZHOU GUANGDA SANITARY CO., LTD.	LK7602	12 VDC; 2,5 A	EN 61347-2-11 EN 61347-1	Tested with appliance
Touch switch 3	C	FOSHAN XINMIN ELETRONIC TECHINOLOGY CO., LTD	XM319-2	12 VDC; 2,5 A	EN 61347-2-11 EN 61347-1	Tested with appliance
Touch switch 4	C	WENZHOU GUANGDA SANITARY CO., LTD.	LK7618	12 VDC; 2,5 A	EN 61347-2-11 EN 61347-1	Tested with appliance
Clock	C	FOSHAN XINMIN ELETRONIC TECHINOLOGY CO., LTD	XM319-T	12 VDC; 2,5 A	EN 61347-2-11 EN 61347-1	Tested with appliance
Infrared sensor switch	C	Shenzhen Hordsung Technology Co., Ltd.	ISH1D20	12 VDC; 2,5 A	EN 61347-2-11 EN 61347-1	Tested with appliance
LED	C	SHENZHN SMILE LIGHTING CO., LTD.	SM-1206W	IF = 60 mA	IEC / TR 62778	Tested with appliance
LED module	C	SHENZHN SMILE LIGHTING CO., LTD.	2835, 3528	12 VDC	EN 62031	Tested with appliance
Relay	B	Xiamen Hongfa Electroacoustic Co., Ltd.	HF32FV 12-HSTF	AC 250 V; Rated coil voltage:12 VDC; 5 A; 85 °C	EN 61810-1	VDE (40012204)
Alternative	D	Shenzhen Yuanze Electric Co., Ltd.	Y32F-SS-112DM	AC 250 V; Rated coil voltage:12 VDC; 5 A; 85 °C	EN 61810-1	TUV (R 50198475)

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict

Fuse	B	XC Electronics (Shen Zhen) Corp. Ltd.	5TE	AC 250 V; 1 A	EN 60127-1 EN 60127-3	VDE (40036821)
Electrical box	C	Wenzhou Guangda Sanitary Ware Co., Ltd.	P2	GWT 650 °C	EN 60598-1 EN 60598-2-1	Tested with appliance
PCB	C	KINGBOARD LAMINATES HOLDINGS LTD	KB-5150	V-0; 130 ℃	EN 60598-1 EN 60598-2-1	UL (E123995) + Tested with appliance
LED board	C	SHENZHN SMILE LIGHTING CO., LTD.	A2	V-0; 130 ℃	EN 60598-1 EN 60598-2-1	Tested with appliance
Heat – shrinkable tube	C	Yueqing mingguang heat shrinkable material Co., Ltd.	R1	GWT 650 °C	EN 60598-1 EN 60598-2-1	Tested with appliance
Close-end connector	C	Heavy Power Co., Ltd.	CE2, CE5	GWT 650 ℃	EN 60598-1 EN 60598-2-1	UL (E113650) + Tested with appliance

Remark: no information found in physical sample, information provided by supplier.

Supplementary information:

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

License available upon request.

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 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 2	**TABLE: Thermal tests of Section 12**		P
	Type reference ..... :	H-1085F50L60XTRSF	—
	Lamp used ..... :	LED module	—
	Lamp control gear used ..... :	AED60-12VLSTB-IP44	—
	Mounting position of luminaire ..... :	Fixed on the wall	—
	Supply wattage (W) ..... :	86,29	—
	Supply current (A) ..... :	0,344	—
	Temperatures in test 1 - 4 below are corrected for ta (°C) ..... :	30	—
	- abnormal operating mode ..... :	10% LEDs were short-circuited	—
1.13 (12.4)	- test 1: rated voltage ..... :	240 V	—
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage or 1,1 times constant voltage/current ..... :	1,06 x 240 V = 254,4 V	—
	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage ..... :	—	—
	Through wiring or looping-in wiring loaded by a current of A during the test ..... :	—	—
1.13 (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 240 V = 264 V	—

Temperature measurements (°C)

Part	Ambient	**Cl. 12.4 – normal**				**Cl. 12.5 – abnormal**	
		test 1	test 2	test 3	limit	test 4	limit
Supply cord	30	—	40,8	—	75	—	—
Tc of LED Driver	30	46,3	—	—	80	—	—
Internal wire	30	—	42,2	—	80	—	—
Mechanical switch	30	—	39,7	—	55	—	—
Touch switch 1	30	—	39,4	—	55	—	—
Infrared sensor switch	30	—	48,7	—	55	—	—
Electrical box	30	—	40,0	—	Ref.	—	—
Relay	30	—	47,0	—	85	—	—
Electrolytic capacitor(hottest)	30	—	50,5	—	105	48,7	115
PCB	30	—	43,0	—	Ref.	—	—
LED board	30	—	53,7	—	Ref.	—	—

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict

Defogger	30	—	42,7	—	Ref.	—	—
Defogger connector	30	—	50,3	—	Ref.	—	—
Closed-end connector	30	—	43,8	—	Ref.	—	—
Mounting surface	30	—	40,7	—	90	39,7	130
Lighted object	30	—	44,3	—	90	42,8	175
Supplementary information: Test with touch switch 1							

	Type reference .....:	H-1085F50L60XTRSF	—
	Lamp used .....:	LED module	—
	Lamp control gear used .....:	AED60-12VLSTB-IP44	—
	Mounting position of luminaire .....:	Fixed on the wall	—
	Supply wattage (W) .....:	80,9	—
	Supply current (A) .....:	0,322	—
	Temperatures in test 1 - 4 below are corrected for ta (°C) .....:	30	—
	- abnormal operating mode.....:	—	—
1.13 (12.4)	- test 1: rated voltage .....:	—	—
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage or 1,1 times constant voltage/current .....:	1,06 x 240 V = 254,4 V	—
	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage.....:	—	—
	Through wiring or looping-in wiring loaded by a current of A during the test .....:	—	—
1.13 (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 .....:	—	—

Temperature measurements (°C)

Part	Ambient	Cl. 12.4 – normal				Cl. 12.5 – abnormal	
		test 1	test 2	test 3	limit	test 4	limit
Touch switch 3	30	—	35,3	—	55	—	—
Supplementary information: Test with touch switch 3							

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict

	Type reference ..... :	H-1085F50L60XTRSF	—
	Lamp used ..... :	LED module	—
	Lamp control gear used ..... :	SNP60-12VFP	—
	Mounting position of luminaire ..... :	Fixed on the wall	—
	Supply wattage (W) ..... :	77,25	—
	Supply current (A) ..... :	0,329	—
	Temperatures in test 1 - 4 below are corrected for ta (°C) ..... :	30	—
	- abnormal operating mode ..... :	—	—
1.13 (12.4)	- test 1: rated voltage ..... :	240 V	—
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage or 1,1 times constant voltage/current ..... :	—	—
	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage ..... :	—	—
	Through wiring or looping-in wiring loaded by a current of A during the test ..... :	—	—
1.13 (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 ..... :	—	—

Temperature measurements (°C)

Part	Ambient	Cl. 12.4 – normal				Cl. 12.5 – abnormal	
		test 1	test 2	test 3	limit	test 4	limit
Tc of LED Driver	30	44,5	—	—	90	—	—

Supplementary information: Test with touch switch 1

	Type reference ..... :	H-1009L6T	—
	Lamp used ..... :	LED	—
	Lamp control gear used ..... :	AED06-12VLS	—
	Mounting position of luminaire ..... :	Fixed on the wall	—
	Supply wattage (W) ..... :	7,4	—
	Supply current (A) ..... :	0,061	—
	Temperatures in test 1 - 4 below are corrected for ta (°C) ..... :	30	—
	- abnormal operating mode ..... :	—	—
1.13 (12.4)	- test 1: rated voltage ..... :	240 V	—

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage or 1,1 times constant voltage/current ..... :	1,06 x 240 V = 254,4 V	—
	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage .....:	—	—
	Through wiring or looping-in wiring loaded by a current of A during the test .....:	—	—
1.13 (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.....:	—	—

Temperature measurements (°C)

Part	Ambient	Cl. 12.4 – normal				Cl. 12.5 – abnormal	
		test 1	test 2	test 3	limit	test 4	limit
Supply cord	30	—	41,0	—	90	—	—
Tc of LED Driver	30	43,9	—	—	80	—	—
Touch switch 2	30	—	39,8	—	55	—	—
Electrolytic capacitor(hottest)	30	—	41,1	—	105	—	—
Internal wire	30	—	38,6	—	80	—	—
Mounting surface	30	—	38,5	—	90	—	—
Lighted object	30	—	38,4	—	90	—	—
Supplementary information: test with touch switch 2							

	Type reference .....:	H-1009L6T	—
	Lamp used.....:	LED	—
	Lamp control gear used .....:	AED06-12VLS	—
	Mounting position of luminaire..... :	Fixed on the wall	—
	Supply wattage (W) ..... :	7,2	—
	Supply current (A) .....:	0,060	—
	Temperatures in test 1 - 4 below are corrected for ta (°C) ..... :	30	—
	- abnormal operating mode.....:	—	—
1.13 (12.4)	- test 1: rated voltage ..... :	—	—
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage or 1,1 times constant voltage/current ..... :	1,06 x 240 V = 254,4 V	—
	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage .....:	—	—
	Through wiring or looping-in wiring loaded by a current of A during the test .....:	—	—

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict

1.13 (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.....:	—	—

Temperature measurements (°C)

Part	Ambient	Cl. 12.4 – normal				Cl. 12.5 – abnormal	
		test 1	test 2	test 3	limit	test 4	limit
Touch switch 4	30	—	35,3	—	55	—	—

Supplementary information: test with touch switch 4

	Type reference .....:	H-1085F50L60XTRSF	—
	Lamp used .....:	LED module	—
	Lamp control gear used .....:	AED60-12VLSTB-IP44	—
	Mounting position of luminaire.....:	Fixed on the wall	—
	Supply wattage (W) .....:	test condition 1: 35,6 test condition 2: 0,40	—
	Supply current (A).....:	test condition 1: 0,165 test condition 2: 0,056	—
	Temperatures in test 1 - 4 below are corrected for ta (°C) .....:	30	—
	- abnormal operating mode.....:	N/A	—
1.12 (12.4)	- test 1: rated voltage .....:	—	—
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage or 1,1 times constant voltage/current .....:	1,06 x 240 = 254,4	—
	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage .....:	—	—
	Through wiring or looping-in wiring loaded by a current of A during the test .....:	—	—
1.12 (12.5)	- test 4: 1,1 times rated voltage or 1,05 times rated wattage or 1,1 times constant voltage/current .....:	—	—

Temperature measurements (°C)

Part	Ambient	Cl. 12.4 – normal				Cl. 12.5 – abnormal	
		test 1	test 2	test 3	limit	test 4	limit
Input wire of LED board (OL) (test condition 1)	30	—	40,4	—	80	—	—
Input wire of LED board (SC) (test condition 2)	30	—	30,9	—	80	—	—

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict

Supplementary information:
test condition 1: with the resistive load set to draw maximum output current
test condition 2: the resistive load is then set to 0 Ω (short circuit)

IEC 60598-2-1			
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) ..... :	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 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
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
(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
	Terminal size and rating		N/A
15.6.2	Mechanical tests		N/A

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
(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: N/A										

--- End of main report ---

Attachment A

IEC60598_2_1H ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

ATTACHMENT TO TEST REPORT IEC 60598-2-1
EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES
Luminaires
Part 2: Particular requirements
Section 1: Fixed general purpose luminaires

Differences according to..... EN IEC 60598-2-1:2021 used in conjunction with EN IEC 60598-1:2021

Annex Form No. ..... EU_GD_IEC60598_2_1H

Annex Form Originator ..... SGS

Master Annex Form..... 2021-09-18

	CENELEC COMMON MODIFICATIONS (EN)	P
	No Common modifications	—

--- End of attachment A ---

Attachment B

EN 62031			
Clause	Requirement + Test	Result - Remark	Verdict
4	**GENERAL REQUIREMENTS**		P
4.4	Integral modules tested assembled in the luminaire		P
4.5	Independent modules complies with requirements in IEC 60598-1		N/A
5	**GENERAL TEST REQUIREMENTS**		P
5.5	SELV-operated LED modules comply with Annex I of IEC 61347-2-13	(see Annex 1)	N/A
	General conditions for tests in Annex A	(see Annex A)	P
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.		—
7	**MARKING**		N/A
	No need such tests		—
8	**TERMINALS**		N/A
	No need such tests		—
9 (9)	**PROVISION FOR PROTECTIVE EARTHING**		N/A
	No need such tests		—
10 (10)	**PROTECTION AGAINST ACCIDENTAL CONTACT WITH LIVE PARTS**		P
	Refer to main report		—
11 (11)	**MOISTURE RESISTANCE AND INSULATION**		P
	Refer to main report		—
12 (12)	**ELECTRIC STRENGTH**		P
	Refer to main report		—
13 (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

Attachment B

EN 62031			
Clause	Requirement + Test	Result - Remark	Verdict
	- 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)	N/A
	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)	N/A
- (14.5)	After the tests has been carried out on three samples:		P
	The insulation resistance ≥ 1 MΩ ..... :	> 500 MΩ	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		P
13.2	**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
15	**CONSTRUCTION**		P
	Wood, cotton, silk, paper and similar fibrous material not used as insulation		P
16 (16)	**CREEPAGE DISTANCES AND CLEARANCES**		N/A
	Refer to main report		—
17 (17)	**SCREWS, CURRENT-CARRYING PARTS AND CONNECTIONS**		P
	Refer to main report		—

Attachment B

EN 62031			
Clause	Requirement + Test	Result - Remark	Verdict
18 (18)	**RESISTANCE TO HEAT, FIRE AND TRACKING**		P
	Refer to main report		—
19 (19)	**RESISTANCE TO CORROSION**		P
	Refer to main report		—
20	**INFORMATION FOR LUMINAIRE DESIGN**		N/A
	Information in Annex D (informative)		—
21	**HEAT MANAGEMENT**		N/A
21.1	**General**		N/A
	Exchangeability is safeguarded by cap or base		N/A
21.2	**Heat-conducting foil and paste**		N/A
	Heat-conducting foil delivered with the module if necessary		N/A
22	**PHOTOBIOLOGICAL SAFETY**		P
22.1	**UV radiation**		P
	Luminous radiation not exceed 2mW/klm		P
22.2	**Blue light hazard**		P
	Assessed according to IEC TR 62778	RG1 (for Strip LED): Lb = 272,3 W/m^2/sr	P
22.3	**Infrared radiation**		N/A
	Requirements for infrared radiation when required		N/A
A	**ANNEX A - TESTS**		P
	All tests performed in accordance with the advice given in Annex H of IEC 61347-1, if applicable		P
13 (14)	**TABLE: tests of fault conditions**		P
Part	**Simulated fault**		**Hazard**
One LED	Short-circuited; The short-circuited LED was no operation		NO
ANNEX 1	**SELV-operated LED modules**		N/A
	No need such tests		—

Attachment B

EN 62031			
Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 2	**TABLE: Critical components information**					P
Object / part No.	**Code**	**Manufacturer/ trademark**	**Type / model**	**Technical data**	**Standard**	**Mark(s) of conformity[1)]**
Refer to main report for details						
Supplementary information: [1)] Provided evidence ensures the agreed level of compliance. See OD-CB2039. The codes above have the following meaning: A - The component is replaceable with another one, also certified, with equivalent characteristics B - The component is replaceable if authorised by the test house C - Integrated component tested together with the appliance D - Alternative component						

ANNEX 3	**Screw terminals (part of the luminaire)**	N/A
	No need such tests	—

ANNEX 4	**Screwless terminals (part of the luminaire)**	P
	Refer to main report	—

--- End of Attachment B ---

Attachment C

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

4 (4)	GENERAL REQUIREMENTS		P
- (4)	Insulation materials for double or reinforced insulation according requirements in Annex N of IEC 61347-1	(see Annex N)	N/A
- (4)	Compliance of independent controlgear enclosure with IEC 60598-1		N/A
- (4)	Built-in magnetic ballast with double or reinforced insulation comply with Annex I of IEC 61347-1		N/A
- (4)	Built-in electronic controlgear with double or reinforced insulation comply with Annex O of IEC 61347-1	(see Annex O)	N/A
- (4)	SELV controlgear comply with Annex L of IEC 61347-1	(see Annex L)	N/A

6 (6)	CLASSIFICATION		P
	Built-in controlgear .....:	Yes ☐ No ☒	—
	Independent controlgear .....:	Yes ☐ No ☒	—
	Integral controlgear .....:	Yes ☒ No ☐	—

7 (7)	MARKING	N/A
	No need such tests	—

8 (10)	PROTECTION AGAINST ACCIDENTAL CONTACT WITH LIVE PARTS		P
	Refer to main report		—

9 (8)	TERMINALS	N/A
	No need such tests	—

10 (9)	PROVISION FOR EARTHING		N/A
	No need such tests		—

11 (11)	MOISTURE RESISTANCE AND INSULATION		P
	Refer to main report		—

12 (12)	ELECTRIC STRENGTH		P
	Refer to main report		—

Attachment C

EN 61347-2-11			
Clause	Requirement + Test	Result - Remark	Verdict
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		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
- (14.2)	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)	N/A
- (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)	N/A
- (14.5)	Short-circuit across electrolytic capacitors	(see appended table)	N/A
- (14.6)	After the tests has been carried out on three samples:		P
	The insulation resistance $\geq$ 1 MΩ .....:	> 500 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		—

15 (15)	**CONSTRUCTION**		**P**
- (15.1)	**Wood, cotton, silk, paper and similar fibrous material**		**P**
	Wood, cotton, silk, paper and similar fibrous material not used as insulation		P
- (15.2)	**Printed circuits**		**P**
	Printed circuits used as internal connections complies with clause 14		P
- (15.3)	**Plugs and socket-outlets used in SELV or ELV circuits**		**N/A**

Attachment C

EN 61347-2-11			
Clause	Requirement + Test	Result - Remark	Verdict
	No dangerous compatibility between output socket-outlet and a plug for socket-outlets for input circuit in relation to installation rules, voltages and frequencies		N/A
	Plugs and socket-outlets for SELV comply with IEC 60906-3 and IEC 60884-2-4		N/A
	Plugs and socket-outlets for SELV ≤ 3 A, ≤ 25 V r.m.s. or ≤ 60 V d.c. and ≤ 72 W comply with IEC 60906-3 and IEC 60884-2-4 or:		N/A
	- plugs not able to enter socket-outlets of other standardised system		N/A
	- socket-outlets not admit plugs of other standardised system		N/A
	- socket-outlets without protective earth		N/A
- (15.4)	**Insulation between circuits and accessible parts**		**P**
- (15.4.2)	SELV circuits		P
	Source used to supply SELV circuits:		P
	- safety isolating transformer in accordance with relevant part 2 of IEC 61558		N/A
	- controlgear providing SELV in accordance with relevant part 2 of IEC 61347		P
	- another source		N/A
	Voltage in the circuit not higher than ELV		P
	SELV circuits insulated from LV by double or reinforced insulation		P
	SELV circuits insulated from non SELV circuits by double or reinforced insulation		N/A
	SELV circuits insulated from FELV circuits by supplementary insulation		N/A
	SELV circuits insulated from other SELV circuits by basic insulation		N/A
	SELV circuits insulated from accessible conductive parts according Table 6 in 15.4.5		P
- (15.4.3)	FELV circuits		N/A
	Source used to supply FELV circuits:		N/A
	- separating transformer in accordance with relevant part 2 of IEC 61558		N/A
	- separating controlgear providing basic insulation between input and output circuits in accordance with relevant part 2 of IEC 61347		N/A
	- another source		N/A

Attachment C

EN 61347-2-11			
Clause	Requirement + Test	Result - Remark	Verdict
	- source in circuits separated by the LV supply by basic insulation		N/A
	Voltage in the circuit not higher than ELV		N/A
	FELV circuits insulated from LV supply by at least basic insulation		N/A
	FELV circuits insulated from other FELV circuits if functional purpose		N/A
	FELV circuits insulated from accessible conductive parts according Table 6 in 15.4.5		N/A
	Plugs and socket-outlets for FELV system comply with:		N/A
	- plugs not able to enter socket-outlets of other voltage systems		N/A
	- socket-outlets not admit plugs of other voltage systems		N/A
	- socket-outlets have a protective conductor contact		N/A
- (15.4.4)	Other circuits		P
	Insulation between circuits other than SELV or FELV and accessible conductive parts in according Table 6 in 15.4.5.		P
- (15.4.5)	Insulation between circuits and accessible conductive parts		P
	Accessible conductive parts insulated from active parts of electric circuits by insulating according Table 6		P
	Requirements for Class II construction with equipotential bonding for protection against indirect contact with live parts:		N/A
	- all conductive parts are connected together		N/A
	- conductive parts are reliably connected together according test of IEC 60598-1 cl. 7.2.3		N/A
	- conductive parts comply with requirements of Annex A in case of insulation fault		N/A
16 (16)	**CREEPAGE DISTANCES AND CLEARANCES**		**P**
	Refer to main report		—
17 (17)	**SCREWS, CURRENT-CARRYING PARTS AND CONNECTIONS**		**P**
	Refer to main report		—

Attachment C

EN 61347-2-11			
Clause	Requirement + Test	Result - Remark	Verdict
18 (18)	**RESISTANCE TO HEAT, FIRE AND TRACKING**		**P**
	Refer to main report		—
19 (19)	**RESISTANCE TO CORROSION**		**N/A**
	No need such tests		—
20 (-)	**ANNEXES**		**P**
	Comply with appropriate annexes of IEC 61347-1	(see Annexes)	P

14	**TABLE: tests of fault conditions**	**P**
Part (For touch switch 1)	Simulated fault	Hazard
Q1	Short-circuited; Switch function fail	NO
U1	Short-circuited; Switch function fail	NO
U2	Short-circuited; Switch function fail	NO
Part (For touch switch 2)	Simulated fault	Hazard
Q1	Short-circuited; Switch function fail	NO
Q2	Short-circuited; Switch function fail	NO
U1	Short-circuited; Switch function fail	NO
Part (For touch switch 3)	Simulated fault	Hazard
Q1	Short-circuited; Switch function fail	NO
Q2	Short-circuited; Switch function fail	NO
C4	Short-circuited; Switch function fail	NO
U2	Short-circuited; Switch function fail	NO
C3	Short-circuited; Switch function fail	NO
Part (For touch switch 4)	Simulated fault	Hazard
U1	Short-circuited; Switch function fail	NO
U2	Short-circuited; Switch function fail	NO
U3	Short-circuited; Switch function fail	NO
Q1	Short-circuited; Switch function fail	NO

Attachment C

EN 61347-2-11			
Clause	Requirement + Test	Result - Remark	Verdict
C7	Short-circuited; Switch function fail		NO
C8	Short-circuited; Switch function fail		NO
Part (For Infrared sensor switch)	Simulated fault		Hazard
Q3	Short-circuited; Switch function fail		NO
Q2	Short-circuited; Switch function fail		NO
U1	Short-circuited; Switch function fail		NO
U3	Short-circuited; Switch function fail		NO
Part (For Clock)	Simulated fault		Hazard
Q1	Short-circuited; Clock function fail		NO
U1	Short-circuited; Clock function fail		NO

(A)	**ANNEX A - TEST TO ESTABLISH WHETHER A CONDUCTIVE PART IS A LIVE PART WHICH MAY CAUSE AN ELECTRIC SHOCK**		N/A
	Refer to main report		—

(C)	**ANNEX C – PARTICULAR REQUIREMENTS FOR ELECTRONIC LAMP CONTROLGEAR WITH MEANS OF PROTECTION AGAINST OVERHEATING**		N/A
	No need such tests		—

(D)	**ANNEX D – REQUIREMENTS FOR CARRY OUT THE HEATING TESTS OF THERMALLY PROTECTED LAMP CONTROLGEAR**		N/A
	Tests in C7 performed in accordance with Annex D, if applicable		N/A

(F)	**ANNEX F - DRAUGHT-PROOF ENCLOSURE**		**P**
	Draught-proof enclosure in accordance with the description		P
	Dimensions of the enclosure		P
	Other design; description		N/A

(H)	**ANNEX H - TESTS**		**P**
	All tests performed in accordance with the advice given in Annex H, if applicable		P

Attachment C

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

(I)	**ANNEX I – ADDITIONAL REQUIREMENTS FOR BUILT-IN MAGNETIC BALLASTS WITH DOUBLE OR REINFORCED INSULATION**		N/A
	No need such tests		—

(L)	**ANNEX L - PARTICULAR ADDITIONAL REQUIREMENTS FOR CONTROLGEARS PROVIDING SELV**		N/A
	No need such tests		—

(N)	**ANNEX N - REQUIREMENTS FOR INSULATION MATERIALS USED FOR DOUBLE OR REINFORCED INSULATION**		N/A
	No need such tests		—

(O)	**ANNEX O - ADDITIONAL REQUIREMENTS FOR BUILT-IN ELECTRONIC CONTROLGEAR WITH DOUBLE OR REINFORCED INSULATION**		N/A
	No need such tests		—

(P)	**ANNEX 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
	No need such tests		—

ANNEX 1	**TABLE: Critical components information**					P
Object / part No.	**Code**	**Manufacturer/ trademark**	**Type / model**	**Technical data**	**Standard**	**Mark(s) of conformity[1)]**
Refer to main report for details.						

Supplementary information:

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

The codes above have the following meaning:

A - The component is replaceable with another one, also certified, with equivalent characteristics

B - The component is replaceable if authorised by the test house

C - Integrated component tested together with the appliance

D - Alternative component

	ANNEX 2: screw terminals (part of the luminaire)	N/A
(14)	**SCREW TERMINALS**	N/A
	No such parts	N/A

Attachment C

EN 61347-2-11			
Clause	Requirement + Test	Result - Remark	Verdict
	ANNEX 3: screwless terminals (part of the luminaire)		N/A
(15)	**SCREWLESS TERMINALS**		N/A
	No such parts		N/A

--- End of Attachment C ---

Attachment D
Photo documentation
Fixed luminaire (LED mirror)
See main report

Details for: H-1085F50L60XTRSF

View:

[X] general

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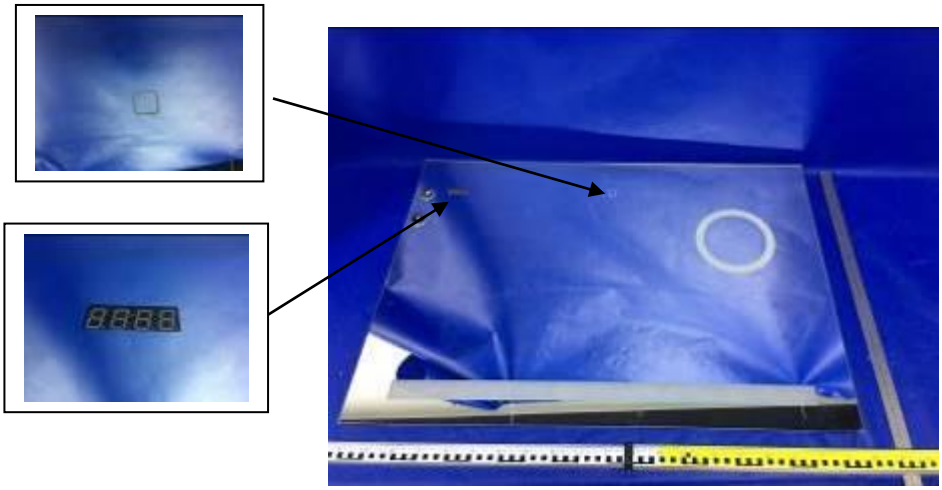

Details for: H-1085F50L60XTRSF

View:

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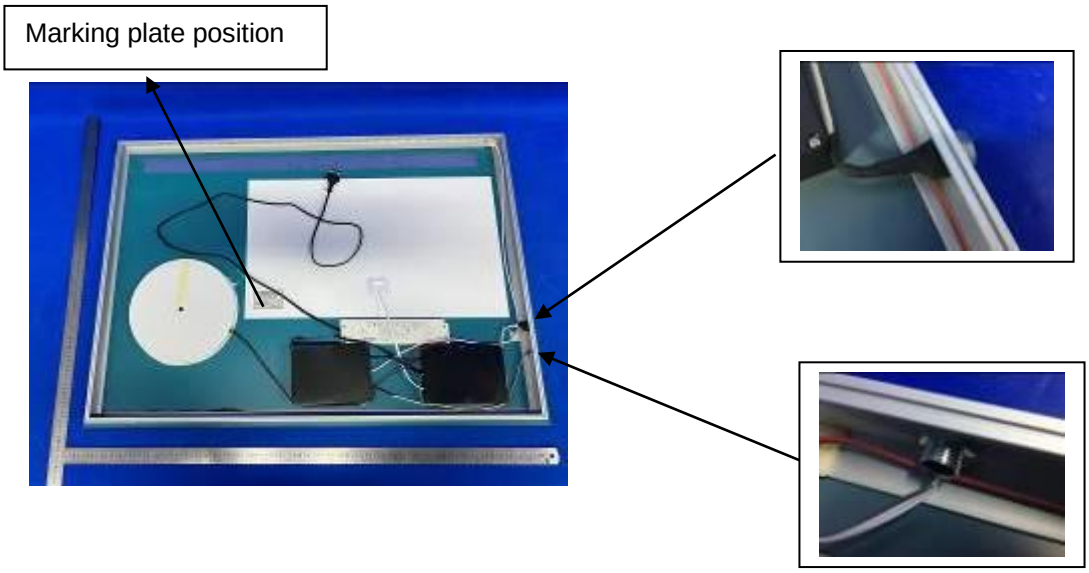

Attachment D
Photo documentation
Fixed luminaire (LED mirror)
See main report

Details for: Marking of mechanical switch and infrared sensor switch for model H-1085F50L60XTRSF

View:

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Details for: Relay, clock and Infrared sensor switch in electrical box for model H-1085F50L60XTRSF

View:

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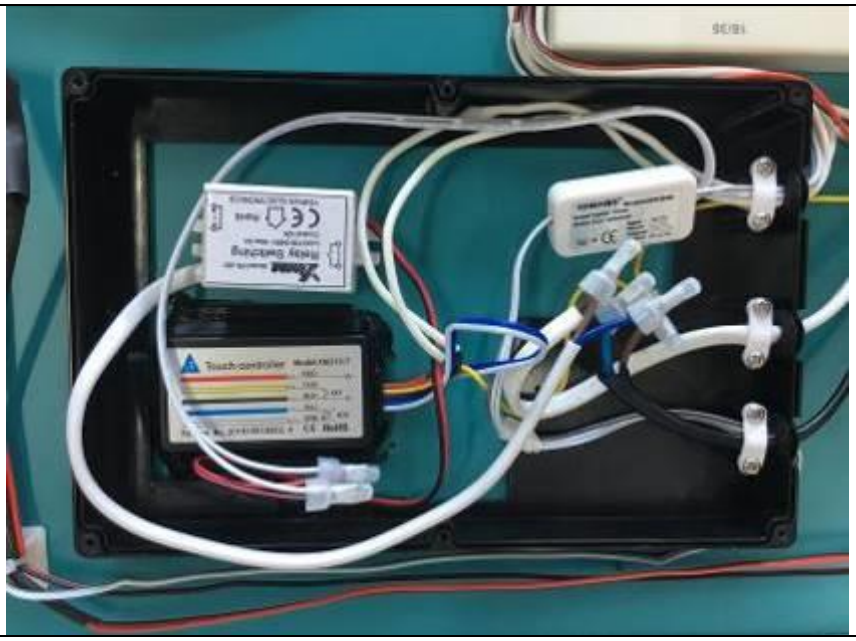

Attachment D
Photo documentation
Fixed luminaire (LED mirror)
See main report

Details for: Touch switch 1 in electrical box for model H-1085F50L60XTRSF

View:

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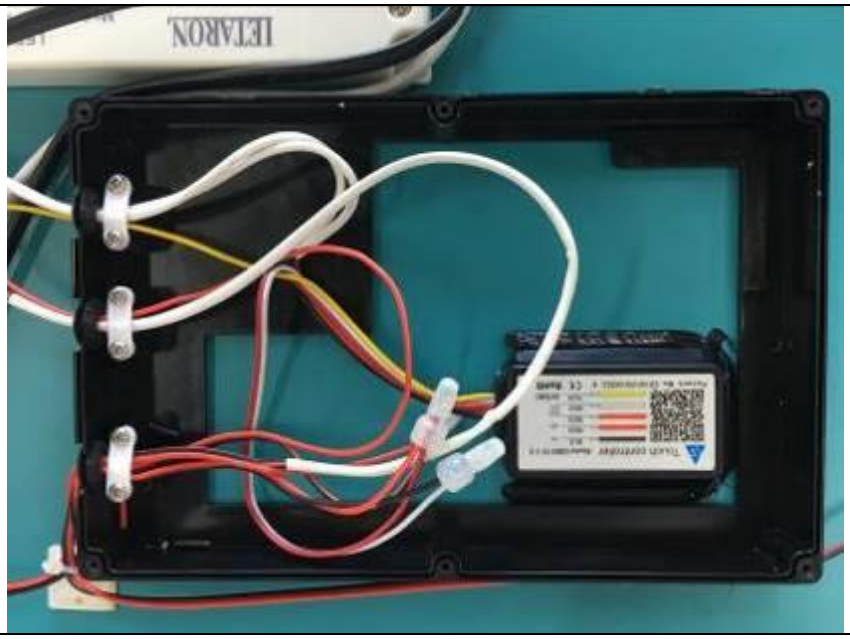

Details for: LED strip

View:

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Attachment D
Photo documentation
Fixed luminaire (LED mirror)
See main report

Details for: LED strip for model H-1085F50L60XTRSF

View:

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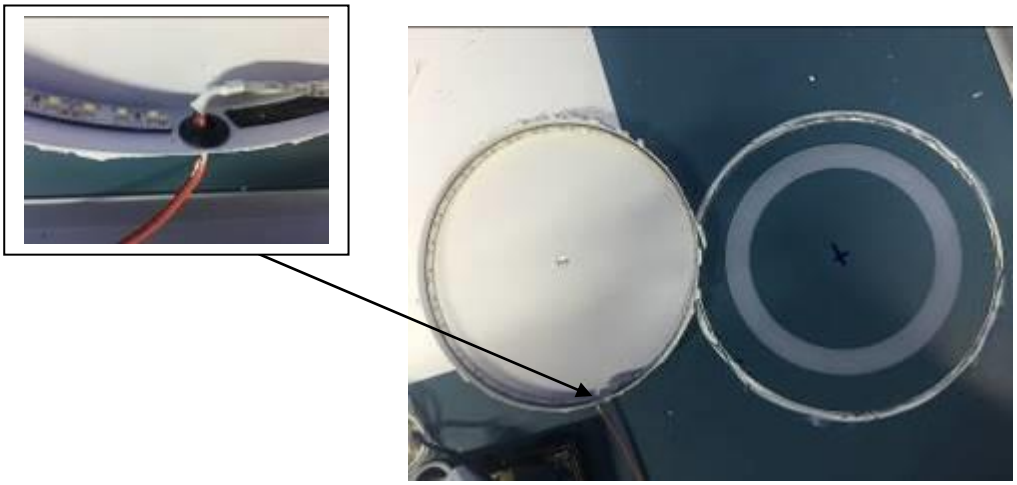
marking plate position



Details for: Internal view for Touch switch 1

View:

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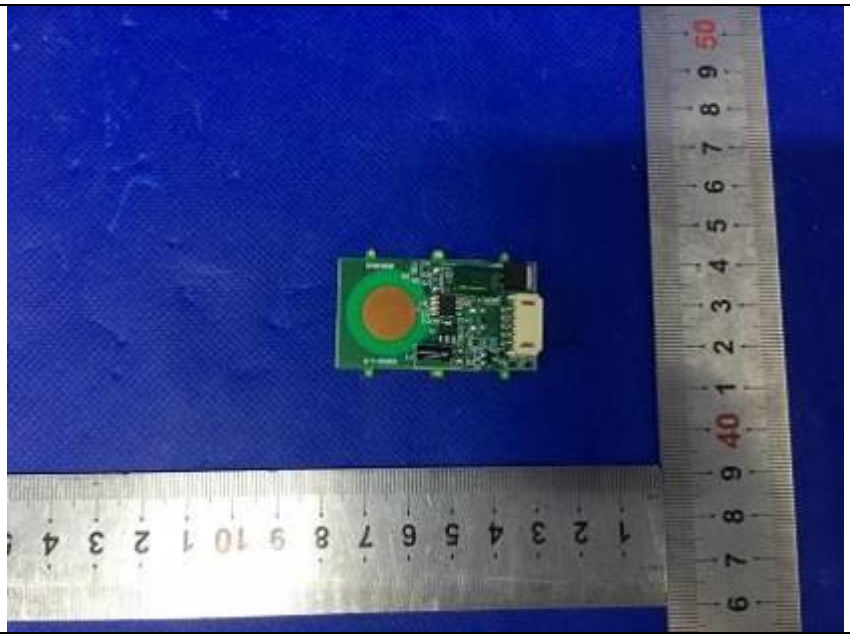

Attachment D
Photo documentation
Fixed luminaire (LED mirror)
See main report

Details for: Infrared sensor switch

View:

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[ ] bottom

Details for: Internal view for infrared sensor switch

View:

[ ] general

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Details for: Internal view for Relay

View:

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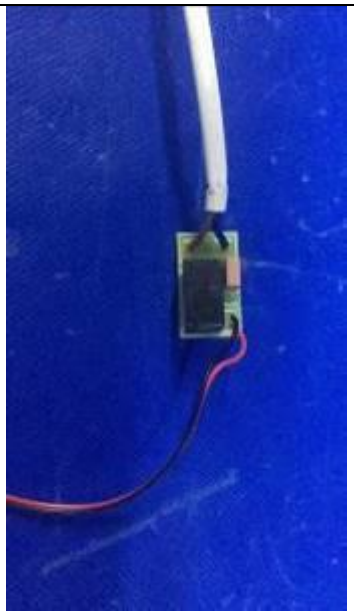
marking plate position



Details for: Internal view for Clock

View:

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marking plate position

Attachment D
Photo documentation
Fixed luminaire (LED mirror)
See main report

Details for: Defogger connector

View:

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marking plate position

Details for: Mechanical switch

View:

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Attachment D
Photo documentation
Fixed luminaire (LED mirror)
See main report

Details for: H-1009L6T

View:

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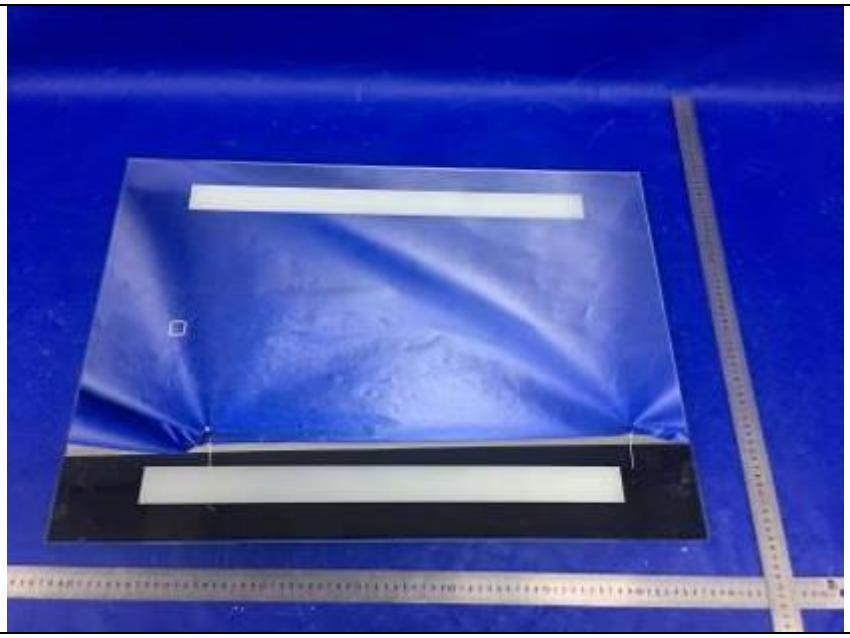

Details for: H-1009L6T

View:

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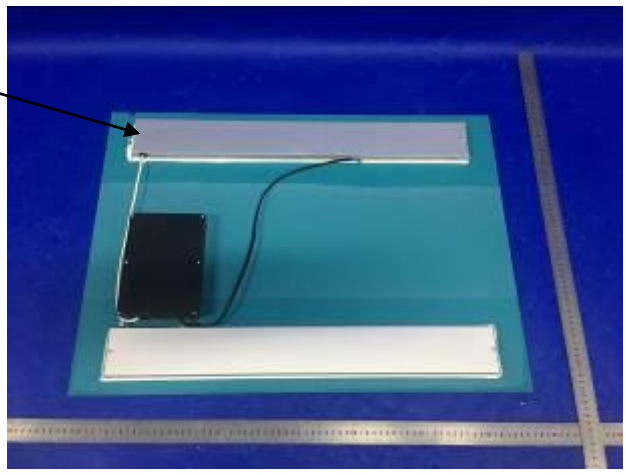

Details for: Touch switch and LED driver in electrical box for model H-1009L6T

View:

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Details for: Internal view for Touch switch 2

View:

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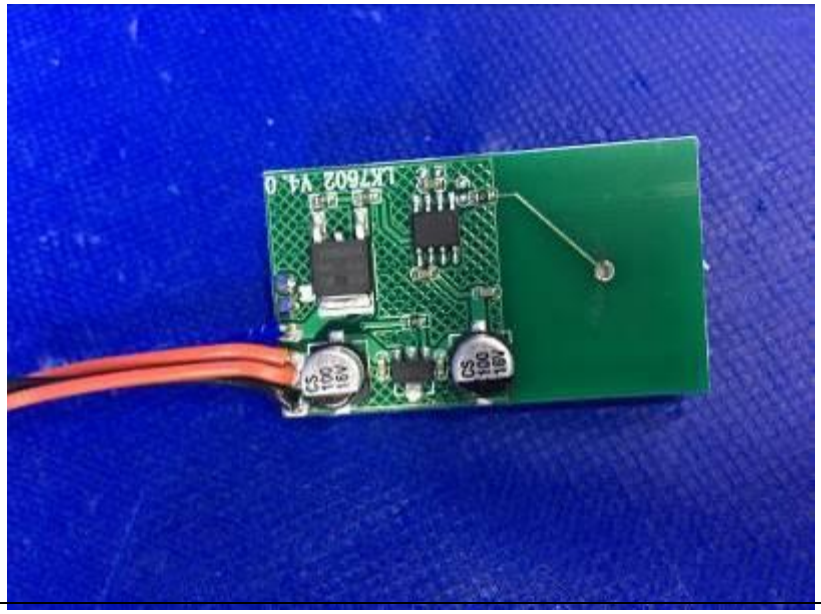

Attachment D
Photo documentation
Fixed luminaire (LED mirror)
See main report

Details for: H-1281L15S

View:

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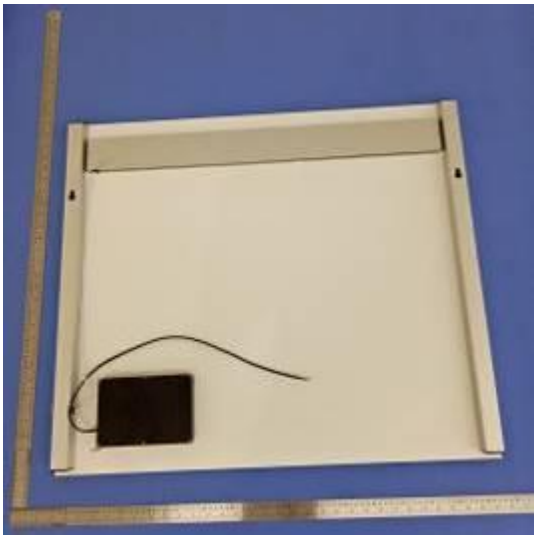

Details for: H-1086L15

View:

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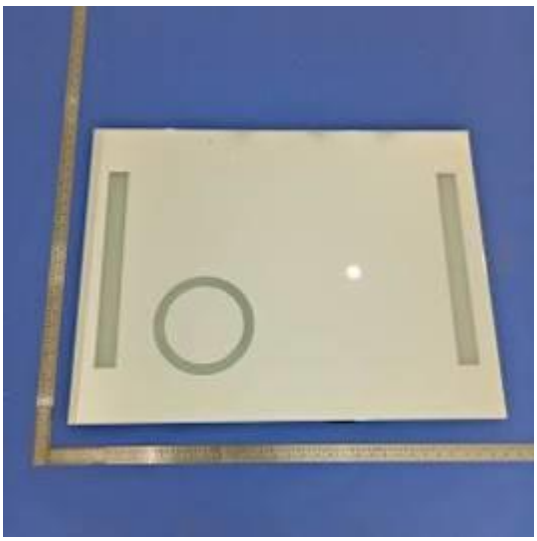

Attachment D
Photo documentation
Fixed luminaire (LED mirror)
See main report

Details for: H-1086L15

View:

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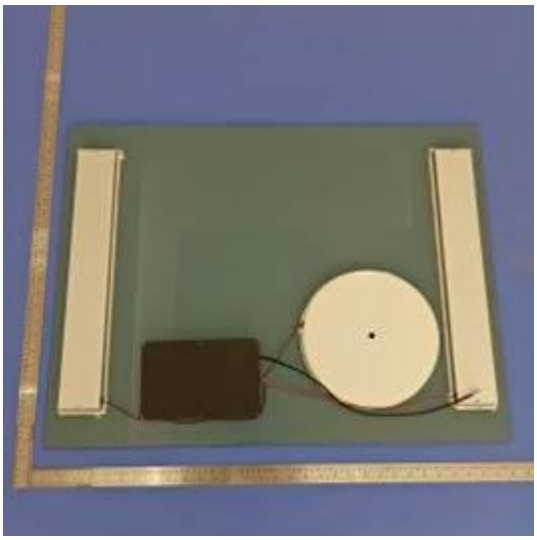

Details for: H-1313L15TX

View:

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Attachment D
Photo documentation
Fixed luminaire (LED mirror)
See main report

Details for: H-1313L15TX

View:

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Details for: H-1293L8T

View:

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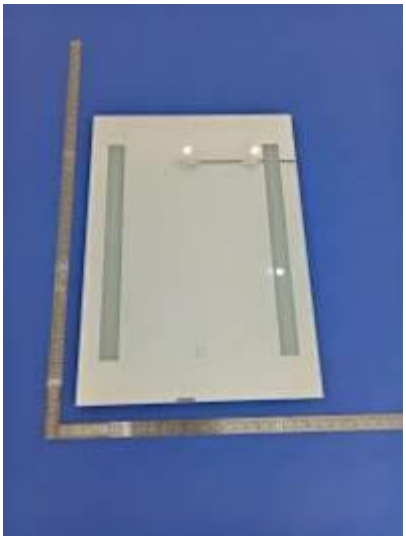

Attachment D
Photo documentation
Fixed luminaire (LED mirror)
See main report

Details for: H-1293L8T

View:

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Details for: H-1302L15T

View:

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Attachment D
Photo documentation
Fixed luminaire (LED mirror)
See main report

Details for: H-1302L15T

View:

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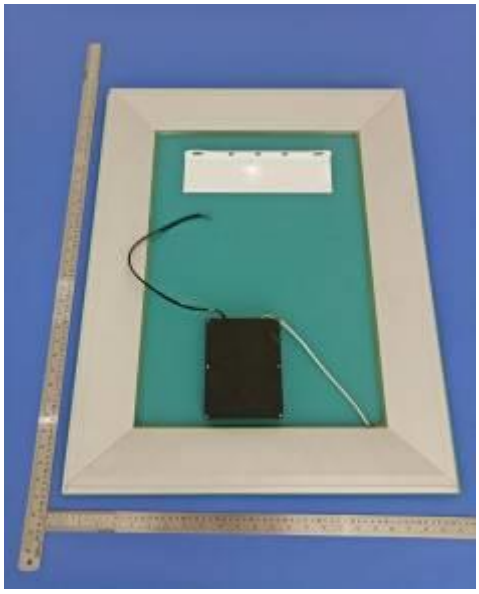

Details for: H-2291L20T

View:

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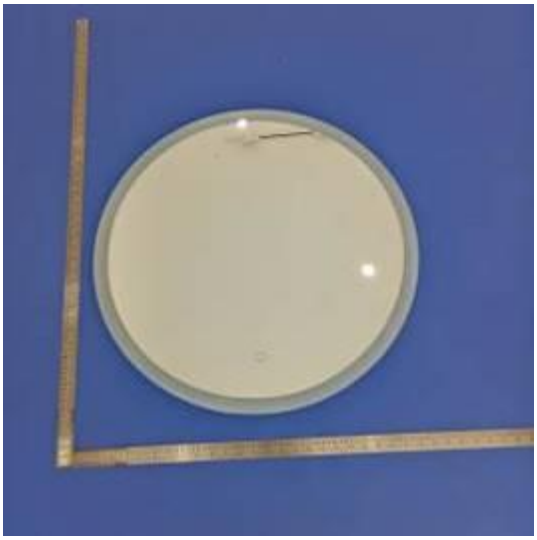

Attachment D
Photo documentation
Fixed luminaire (LED mirror)
See main report

Details for: H-2291L20T

View:

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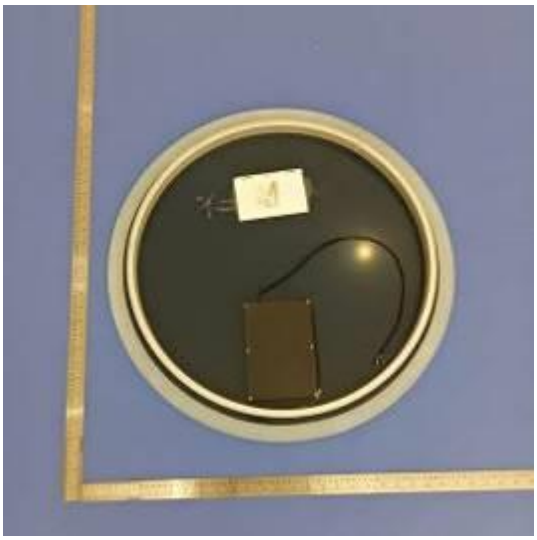

Details for: H-2292L15T

View:

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Attachment D
Photo documentation
Fixed luminaire (LED mirror)
See main report

Details for: H-2292L15T

View:

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Details for: H-3061L20

View:

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Attachment D
Photo documentation
Fixed luminaire (LED mirror)
See main report

Details for: H-3061L20

View:

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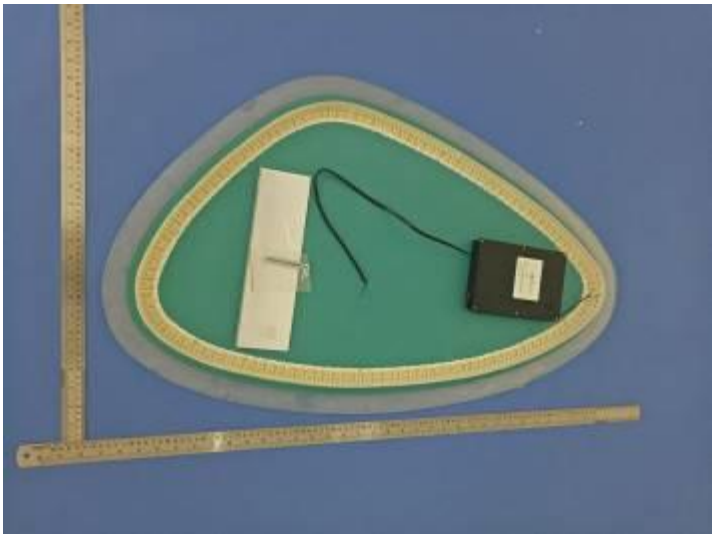

Details for: H-1311L15R

View:

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Attachment D
Photo documentation
Fixed luminaire (LED mirror)
See main report

Details for: H-1311L15R

View:

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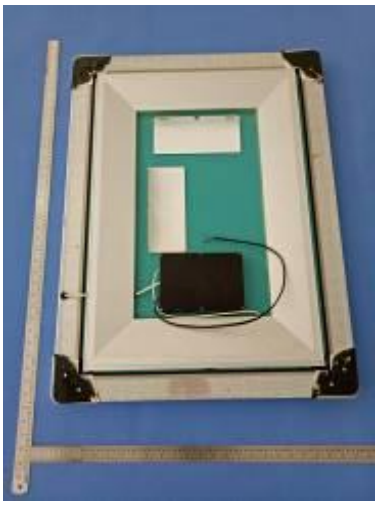

Details for: H-2290L20R

View:

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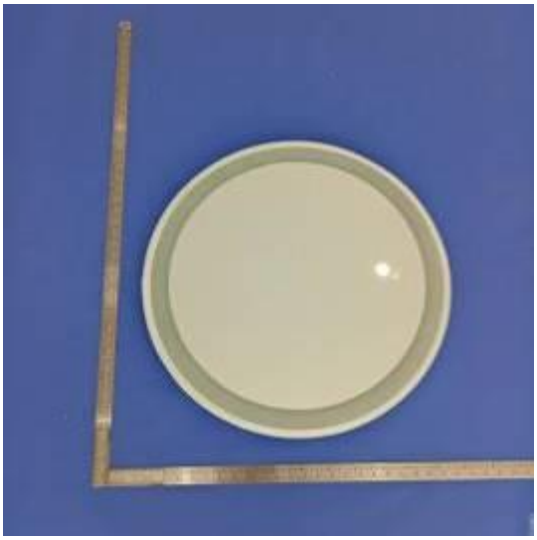

Attachment D
Photo documentation
Fixed luminaire (LED mirror)
See main report

Details for: H-2290L20R

View:

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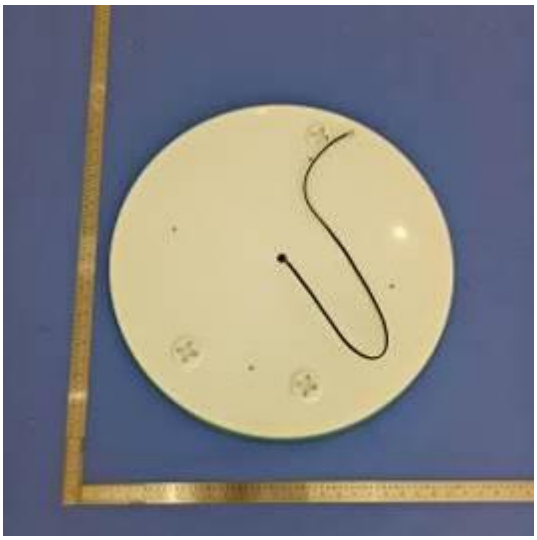

Details for: H-1297L15T

View:

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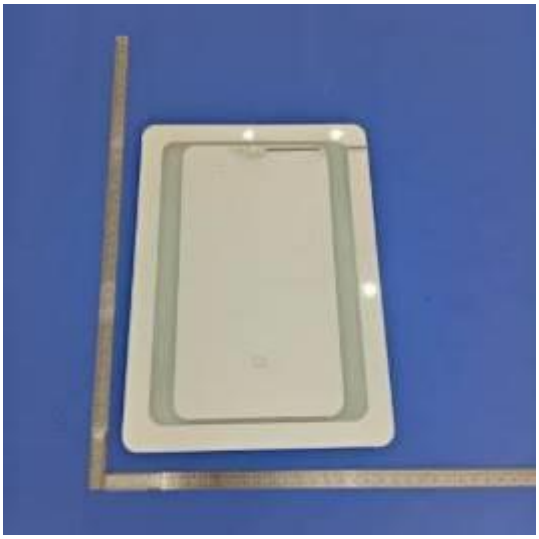

Attachment D
Photo documentation
Fixed luminaire (LED mirror)
See main report

Details for: H-1297L15T

View:

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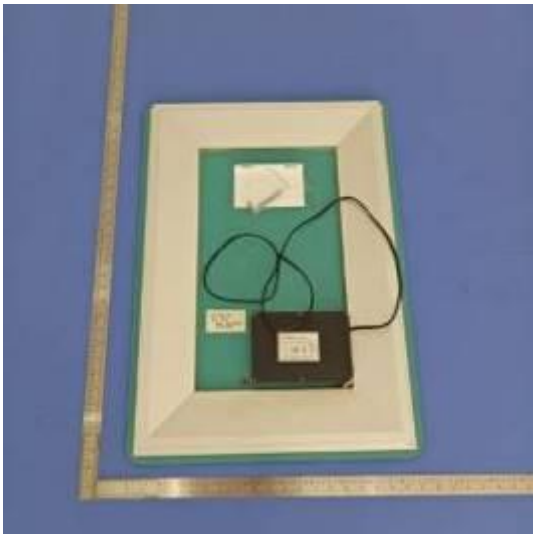

Details for: H-1281L15S

View:

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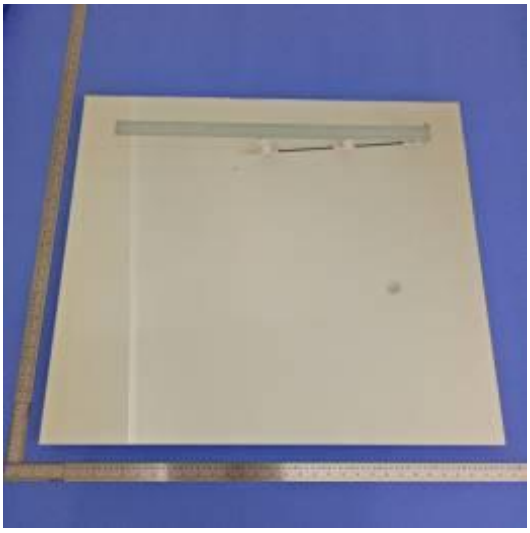

Attachment D
Photo documentation
Fixed luminaire (LED mirror)
See main report

Details for: LED driver AED60-12VLSTB-IP44

View:

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Details for: LED driver SNP60-12VFP

View:

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Attachment D
Photo documentation
Fixed luminaire (LED mirror)
See main report

Details for: LED driver AED48-12VLSTB-IP44

View:

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Details for: LED driver AED36-12VLSJ

View:

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Details for: LED driver SE30-12VL

View:

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Details for: LED driver AED25-12VLSJ

View:

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Attachment D
Photo documentation
Fixed luminaire (LED mirror)
See main report

Details for: LED driver SNP20-12VF-E

View:

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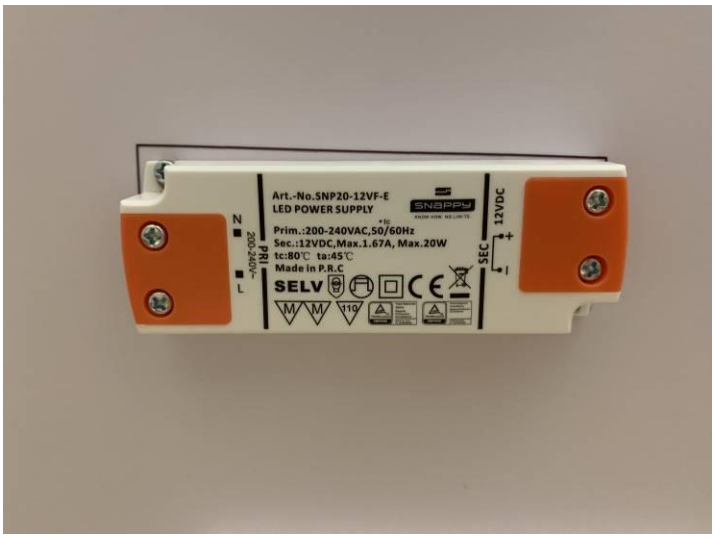

Details for: LED driver AED20-12VLSJ

View:

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Attachment D
Photo documentation
Fixed luminaire (LED mirror)
See main report

Details for: LED driver SNP15-12VL

View:

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Details for: LED driver AED15-12VLSJ

View:

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Attachment D
Photo documentation
Fixed luminaire (LED mirror)
See main report

Details for: LED driver SNP8-12VL-1

View:

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Details for: LED driver AED9-12VLS

View:

[ ] general

[ ] front

[ ] rear

[ ] right

[ ] left

[ ] top

[ ] bottom

Attachment D
Photo documentation
Fixed luminaire (LED mirror)
See main report

Details for: LED driver SNP6-12VF

View:

[ ] general

[ ] front

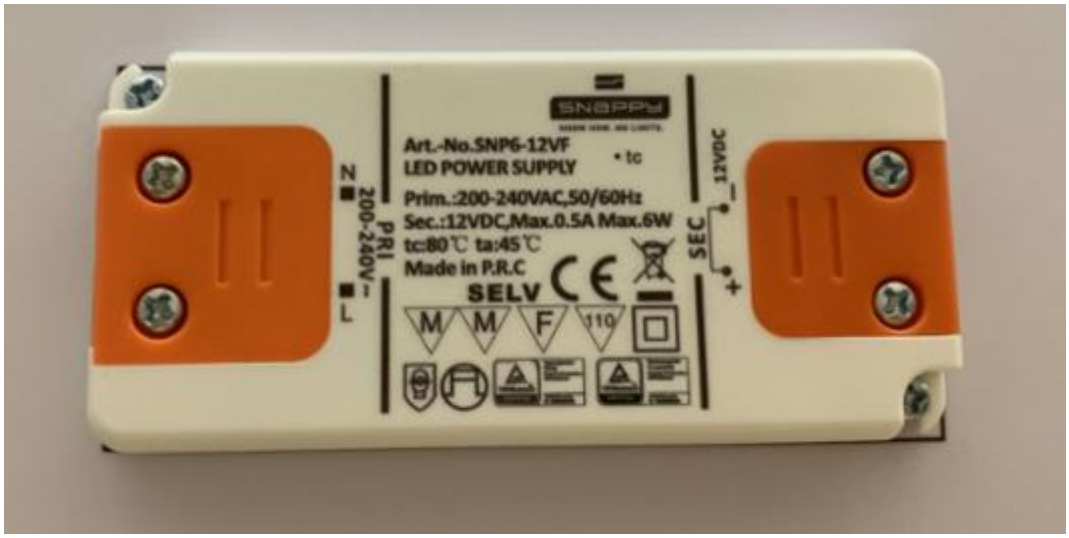
[ ] rear

[ ] right

[ ] left

[ ] top

[ ] bottom



Details for: LED driver AED06-12VLS

View:

[ ] general

[ ] front

[ ] rear

[ ] right

[ ] left

[ ] top

[ ] bottom

Details for: LED driver SS20-12VF

View:

[ ] general

[ ] front

[ ] rear

[ ] right

[ ] left

[ ] top

[ ] bottom

Details for: Touch switch 3

View:

[ ] general

[ ] front

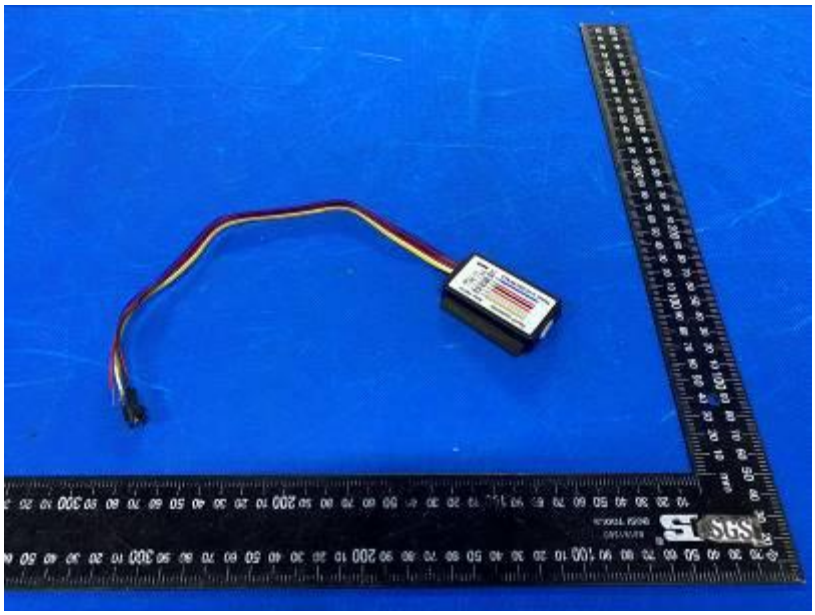
[ ] rear

[ ] right

[ ] left

[ ] top

[ ] bottom



Attachment D
Photo documentation
Fixed luminaire (LED mirror)
See main report

Details for: Internal view for Touch switch 3

View:

[ ] general

[ ] front

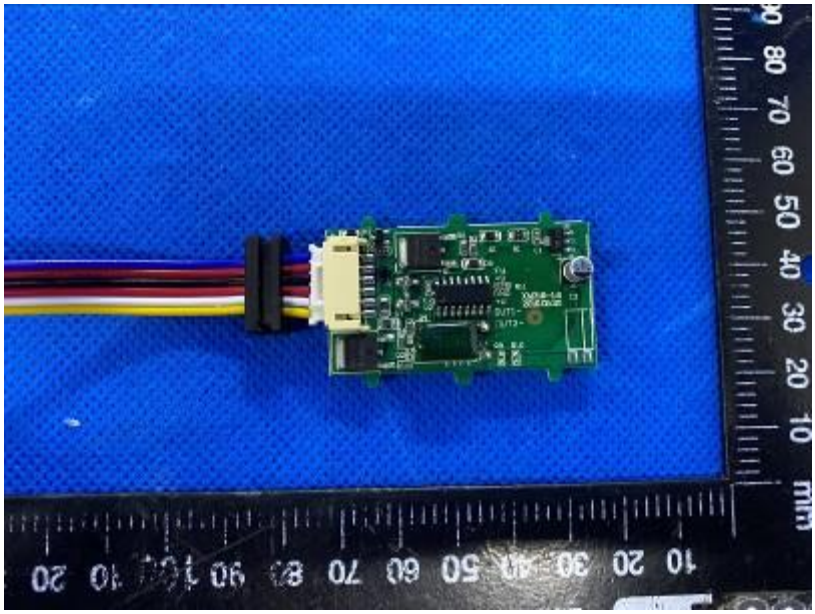
[ ] rear

[ ] right

[ ] left

[ ] top

[ ] bottom



Details for: Touch switch 4

View:

[ ] general

[ ] front

[ ] rear

[ ] right

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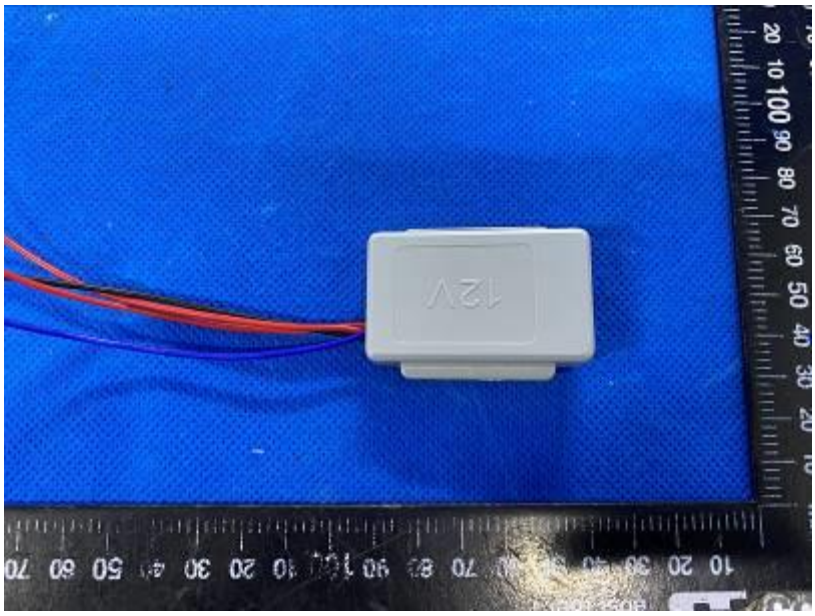
[ ] top

[ ] bottom



Attachment D
Photo documentation
Fixed luminaire (LED mirror)
See main report

Details for: Internal view for Touch switch 4

View:

[ ] general

[ ] front

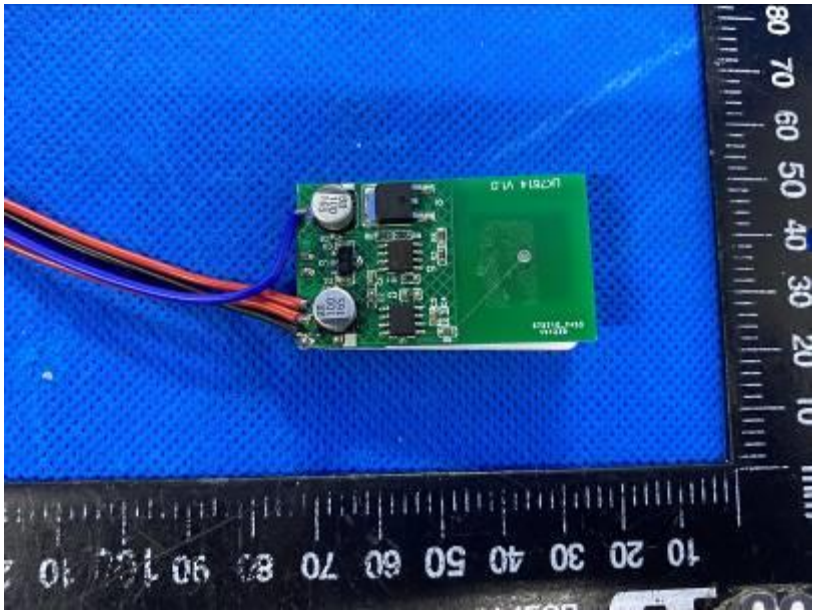
[ ] rear

[ ] right

[ ] left

[ ] top

[ ] bottom



Details for: Plug for model H-1085F50L60XTRSF

View:

[ ] general

[ ] front

[ ] rear

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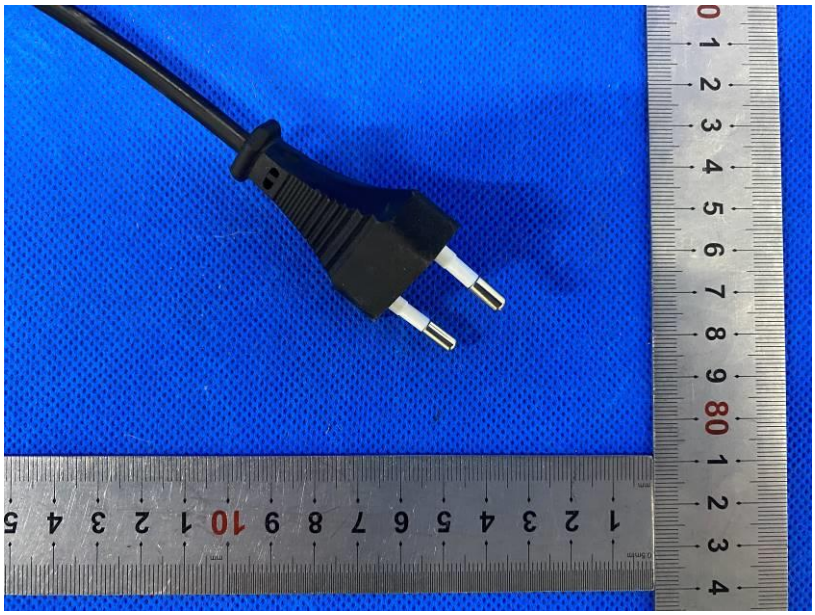
[ ] top

[ ] bottom



---End for Attachment D---