



中国认可
国际互认
检测
TESTING
CNAS L6478



TEST REPORT

Reference No...... : WTF18F05113324X1L
Applicant..... : Lambert et Fils Luminaires Inc.
Address..... : 6250 rue Hutchison #100 Montreal Qc H2V 4C5 Canada
Manufacturer : The same as above
Address..... : The same as above
Product Name..... : Dot Collection (hardwire luminaires)
Model No..... : See model list on page 3
Standards..... : Luminaires
Part 2-1: Fixed general purpose luminaires
IEC 60598-2-1:1979+A1:1987
IEC 60598-1:2014
used in conjunction with Australian deviation

Date of Receipt sample : 2018-06-19
Date of Test : 2018-06-19 to 2018-07-02
Date of Issue..... : 2018-09-27
Test Report Form No. : WSL-6059821A-02A
Test Result..... : **Pass**

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

Prepared By:

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Approved by:



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Test item description: Fixed luminaires	
Trade Mark: --	
Model/Type reference: See model list on page 3	
Ratings: See model list on page 3	
Copy of marking plate:	
Model No.: DOT10SW 220-240V~ 50Hz G9 5 x 6W LED bulb  Lambert et Fils Luminaires Inc. Model No.: DOT01 220-240V~ 50Hz G9 12 x 6W LED bulb  Lambert et Fils Luminaires Inc.	
On the luminaries surface	
G9 6W LED bulb	
The label nearest to the lampholder	
Remark: the marking labels for other models are identical as above, except the model name & rated wattage.	
Summary of testing:	
1. Unless otherwise specified, the models DOT03SW, DOT10SW, DOT01, DOT02 and DOT11 were chosen as representative models to perform all tests, and the tests results complied with the requirements of the standards mentioned in page one. 2. Australian deviation to IEC 60598-1:2008 and AS/NZS 60598.1:2017, IEC 60598-2-1:1979+A1:1987 and AS/NZS 60598.2.1:2014+A1:2016 was considered and found to comply with the requirement. 3. Only the most unfavorable results are recorded in this report.	

Test items particulars:

Classification of installation and use.....: Fixed

Supply Connection.....: Supply cords with plugs for DOT03SW and DOT10SW
Terminal block for other models

Possible test case verdicts:

- test case does not apply to the test object.....: N (Not applicable)
- test object does meet the requirement.....: P (Pass)
- test object does not meet the requirement.....: F (Fail)

General remarks:

"(see remark #)" refers to a remark appended to the report.

"(see appended table)" refers to a table appended to the report.

Throughout this report a point is used as the decimal separator.

2018-09-27:

This report is based on report WTF18F05113324L for updating information of wire and updating the photo document. The report WTF18F05113324L was become invalid after issuing of this report.

General product information:

1. Fixed general purpose luminaries. For indoor use only.
2. All models are with the same construction and ratings except the appearance and rated wattage.
3. 220-240Vac, 50Hz, other details see below model list.

Item	Model	Rated power (W)	Protection against electric shock	IP degree
1	DOT03SW	G9 1x6W LED bulb	Class I	IP20
2	DOT03HW	G9 1x6W LED bulb	Class I	IP20
3	DOT10SW	G9 5x6W LED bulb	Class I	IP20
4	DOT10HW	G9 5x6W LED bulb	Class I	IP20
5	DOT07	G9 2x6W LED bulb	Class I	IP20
6	DOT11	G9 5 x Max. 6W LED	Class I	IP20
7	DOT01	G9 12 x Max. 6W LED	Class I	IP20
8	DOT02	G9 1 x Max. 6W LED	Class I	IP20

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.2 (0)	GENERAL TEST REQUIREMENTS		P
1.2 (0.3)	More sections applicable	Yes ☐ No ☒	—
1.2 (0.5)	Components	(see Annex 1)	—
1.2 (0.7)	Information for luminaire design in light sources standards		—
1.2 (0.7.2)	Light source safety standard	IEC 62560	—
	Luminaire design in the light source safety standard		P

1.4 (2)	CLASSIFICATION		P
1.4 (2.2)	Type of protection (Class 0 excluded).....	Class I	—
1.4 (2.3)	Degree of protection (Requirement: Ordinary).....	IP20	—
1.4 (2.4)	Luminaire suitable for direct mounting on normally flammable surfaces	Yes ☒ No ☐	—
	Luminaire not suitable for direct mounting on normally flammable surfaces.....	Yes ☐ No ☒	—
1.4 (2.5)	Luminaire for normal use	Yes ☒ No ☐	—
	Luminaire for rough service	Yes ☐ No ☒	—

1.5 (3)	MARKING		P
1.5 (3.2)	Mandatory markings	See "Copy of marking plate"	P
	Position of the marking		P
	Format of symbols/text		P
1.5 (3.3)	Additional information		P
	Language of instructions	In English	P
1.5 (3.3.1)	Combination luminaires		N
1.5 (3.3.2)	Nominal frequency in Hz	50 Hz	P
1.5 (3.3.3)	Operating temperature		N
1.5 (3.3.4)	Symbol or warning notice		N
1.5 (3.3.5)	Wiring diagram		N
1.5 (3.3.6)	Special conditions		N
1.5 (3.3.7)	Metal halide lamp luminaire – warning		N
1.5 (3.3.8)	Limitation for semi-luminaires		N
1.5 (3.3.9)	Power factor and supply current		N
1.5 (3.3.10)	Suitability for use indoors		N
1.5 (3.3.11)	Luminaires with remote control		N
1.5 (3.3.12)	Clip-mounted luminaire – warning		N
1.5 (3.3.13)	Specifications of protective shields		N

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.5 (3.3.14)	Symbol for nature of supply	~	P
1.5 (3.3.15)	Rated current of socket outlet		N
1.5 (3.3.16)	Rough service luminaire		N
1.5 (3.3.17)	Mounting instruction for type Y, type Z and some type X attachments	Type Y	P
1.5 (3.3.18)	Non-ordinary luminaires with PVC cable		N
1.5 (3.3.19)	Protective conductor current in instruction if applicable		N
1.5 (3.3.20)	Provided with information if not intended to be mounted within arms reach		P
1.5 (3.3.21)	Non-replaceable and non-user replaceable light sources information provided		N
1.5 (3.3.22)	Controllable luminaires, classification of insulation provided		N
1.5 (3.3.23)	Luminaire without controlgear provided with necessary information for selection of appropriate component		N
1.5 (3.3.24)	If not supplied with terminal block, information on the packaging		N
1.5 (3.4)	Test with water		P
	Test with hexane		P
	Legible after test		P
	Label attached		P

1.6 (4)	CONSTRUCTION		P
1.6 (4.2)	Components replaceable without difficulty		P
1.6 (4.3)	Wireways smooth and free from sharp edges		P
1.6 (4.4)	Lampholders		P
1.6 (4.4.1)	Integral lampholder		N
1.6 (4.4.2)	Wiring connection		N
1.6 (4.4.3)	Lampholder for end-to-end mounting		N
1.6 (4.4.4)	Positioning	G9; checked by inspection	P
	- pressure test (N)	---	N
	After test the lampholder comply with relevant standard sheets and show no damage		N
	After test on single-capped lampholder the lampholder have not moved from its position and show no permanent deformation		N
	- bending test (Nm)	---	N

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	After test the lampholder have not moved from its position and show no permanent deformation		N
1.6 (4.4.5)	Peak pulse voltage		N
1.6 (4.4.6)	Centre contact		N
1.6 (4.4.7)	Parts in rough service luminaires resistant to tracking		N
1.6 (4.4.8)	Lamp connectors		N
1.6 (4.4.9)	Caps and bases correctly used		N
1.6 (4.4.10)	Light source for lampholder or connection according IEC 60061 not connected another way		P
1.6 (4.5)	Starter holders		N
	Starter holder in luminaires other than class II	No starter holder used	N
	Starter holder class II construction		N
1.6 (4.6)	Terminal blocks		P
	Tails		N
	Unsecured blocks		P
1.6 (4.7)	Terminals and supply connections		P
1.6 (4.7.1)	Contact to metal parts		N
1.6 (4.7.2)	Test 8 mm live conductor		P
	Test 8 mm earth conductor		P
1.6 (4.7.3)	Terminals for supply conductors		P
1.6 (4.7.3.1)	Welded connections:		N
	- stranded or solid conductor		N
	- spot welding		N
	- welding between wires		N
	- Type Z attachment		N
	- mechanical test according to 15.8.2		N
	- electrical test according to 15.9		N
	- heat test according to 15.9.2.3 and 15.9.2.4		N
1.6 (4.7.4)	Terminals other than supply connection		N
1.6 (4.7.5)	Heat-resistant wiring/sleeves		N
1.6 (4.7.6)	Multi-pole plug		N
	- test at 30 N		N
1.6 (4.8)	Switches:		N
	- adequate rating		N
	- adequate fixing		N

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	- polarized supply		N
	- compliance with 61058-1 for electronic switches		N
1.6 (4.9)	Insulating lining and sleeves		P
1.6 (4.9.1)	Retainment		P
	Method of fixing : By construction		P
1.6 (4.9.2)	Insulated linings and sleeves		P
	Resistant to a temperature > 20 °C to the wire temperature or		P
	a) & c) Insulation resistance and electric strength		N
	b) Ageing test. Temperature (°C) : --		N
1.6 (4.10)	Insulation of Class II luminaires		N
1.6 (4.10.1)	No contact, mounting surface – accessible metal parts – wiring of basic insulation		N
	Safe installation fixed luminaires		N
	Capacitors and switches		N
	Interference suppression capacitors according to IEC 60384-14		N
1.6 (4.10.2)	Assembly gaps:		N
	- not coincidental		N
	- no straight access with test probe		N
1.6 (4.10.3)	Retainment of insulation:		N
	- fixed		N
	- unable to be replaced; luminaire inoperative		N
	- sleeves retained in position		N
	- lining in lampholder		N
1.6 (4.10.4)	Protective impedance device		N
	Double or reinforced insulation bridged by appropriate and at least two resistors or two Y2 capacitors or one Y1 capacitor		N
	Y1 or Y2 capacitors comply with IEC 60384-14		N
	Resistors comply with test (a) in 14.1 of IEC 60065		N
1.6 (4.11)	Electrical connections		P
1.6 (4.11.1)	Contact pressure		P
1.6 (4.11.2)	Screws:		N
	- self-tapping screws		N
	- thread-cutting screws		N

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.6 (4.11.3)	Screw locking:		P
	- spring washer		P
	- rivets		N
1.6 (4.11.4)	Material of current-carrying parts		P
1.6 (4.11.5)	No contact to wood or mounting surface		P
1.6 (4.11.6)	Electro-mechanical contact systems		N
1.6 (4.12)	Mechanical connections and glands		P
1.6 (4.12.1)	Screws not made of soft metal		P
	Screws of insulating material		P
	Torque test: torque (Nm); part..... : Plastic screw used as fixing cord anchorage: 0.5Nm		P
	Torque test: torque (Nm); part..... : Screw for fixing lampholder: 1.2Nm		P
	Torque test: torque (Nm); part..... : Screw for fixing earth terminal: 0.6Nm		P
	Torque test: torque (Nm); part..... : Fixed earth wire on the mounting bracket: 1,2Nm		P
	Torque test: torque (Nm); part..... : Plastic screw used as Cord anchorage: 0,5Nm		P
1.6 (4.12.2)	Screws with diameter < 3 mm screwed into metal		P
1.6 (4.12.4)	Locked connections:		P
	- fixed arms; torque (Nm)..... : ≤ M 10; 2.5 Nm		P
	- lampholder; torque (Nm)..... : ---		N
	- push-button switches; torque 0,8 Nm..... : ---		N
1.6 (4.12.5)	Screwed glands; force (Nm) : 2,5Nm		P
1.6 (4.13)	Mechanical strength		P
1.6 (4.13.1)	Impact tests:		P
	- fragile parts; energy (Nm)..... : --		N
	- other parts; energy (Nm) : Enclosure: 0.35 Nm		P
	1) live parts		P
	2) linings		N
	3) protection		P
	4) covers		P
1.6 (4.13.2)	Metal parts have adequate mechanical strength		P
1.6 (4.13.3)	Straight test finger	Enclosure: 30 N	P
1.6 (4.13.4)	Rough service luminaires		N
	- IP54 or higher		N

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	a) fixed		N
	b) hand-held		N
	c) delivered with a stand		N
	d) for temporary installations and suitable for mounting on a stand		N
1.6 (4.13.6)	Tumbling barrel		N
1.6 (4.14)	Suspensions and adjusting devices		P
1.6 (4.14.1)	Mechanical load:		P
	A) four times the weight	Max. 2,068Kg*4 (used anti-drop chain) for DOT11	P
	B) torque 2,5 Nm	DOT01: 2,5Nm	P
	C) bracket arm; bending moment (Nm)	---	N
	D) load track-mounted luminaires	---	N
	E) clip-mounted luminaires, glass-shelve. Thickness (mm)	---	N
	Metal rod. diameter (mm)	---	N
	Fixed luminaire or independent control gear without fixing devices		N
1.6 (4.14.2)	Load to flexible cables		P
	Mass (kg)	DOT02: 0,512Kg DOT11: 1,737Kg	P
	Stress in conductors (N/mm ²)	< 15 N/mm ²	P
	Mass (kg) of semi-luminaire	---	N
	Bending moment (Nm) of semi-luminaire	---	N
1.6 (4.14.3)	Adjusting devices:		P
	- flexing test; number of cycles	150 cycles for DOT01	P
	- strands broken	0	P
	- electric strength test afterwards		P
1.6 (4.14.4)	Telescopic tubes: cords not fixed to tube; no strain on conductors		N
1.6 (4.14.5)	Guide pulleys		N
1.6 (4.14.6)	Strain on socket-outlets		N
1.6 (4.15)	Flammable materials:		N
	- glow-wire test 650 °C		N
	- spacing ≥ 30 mm		N
	- screen withstanding test of 13.3.1		N
	- screen dimensions		N

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	- no fiercely burning material		N
	- thermal protection		N
	- electronic circuits exempted		N
1.6 (4.15.2)	Luminaires made of thermoplastic material with lamp control gear		N
	a) construction		N
	b) temperature sensing control		N
	c) surface temperature		N
1.6 (4.16)	Luminaires for mounting on normally flammable surfaces		P
	No lamp control gear		P
1.6 (4.16.1)	Lamp control gear spacing:		N
	- spacing 35 mm		N
	- spacing 10 mm		N
1.6 (4.16.2)	Thermal protection:		N
	- in lamp control gear		N
	- external		N
	- fixed position		N
	- temperature marked lamp control gear		N
1.6 (4.16.3)	Design to satisfy the test of 12.6	(see 12.6)	N
1.6 (4.17)	Drain holes		N
	Clearance at least 5 mm		N
1.6 (4.18)	Resistance to corrosion:		P
1.6 (4.18.1)	- rust-resistance		N
1.6 (4.18.2)	- season cracking in copper		P
1.6 (4.18.3)	- corrosion of aluminium		N
1.6 (4.19)	Ignitors compatible with ballast		N
1.6 (4.20)	Rough service vibration		N
1.6 (4.21)	Protective shield:		N
1.6 (4.21.1)	Shield fitted if tungsten halogen lamps or metal halide lamps		N
	Shield of glass if tungsten halogen lamps		N
1.6 (4.21.2)	Particles from a shattering lamp not impair safety		N
1.6 (4.21.3)	No direct path		N
1.6 (4.21.4)	Impact test on shield		N
	Glow-wire test on lamp compartment		N
1.6 (4.22)	Attachments to lamps not cause overheating or damage		N

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.6 (4.23)	Semi-luminaires comply Class II		N
1.6 (4.24)	Photobiological hazards		N
1.6 (4.24.1)	No excessive UV radiation if tungsten halogen lamps and metal halide lamps (Annex P)		N
1.6 (4.24.2)	Retinal blue light hazard		N
	Class of risk group assessed according to IEC/TR 62778.....	--	--
	Luminaires with E_{thr} :		N
	a) Fixed luminaires		N
	- distance x m, borderline between RG1 and RG2..		N
	- marking and instruction according 3.2.23		N
	b) Portable and handheld luminaires		N
	- marking according 3.2.23 if RG1 exceeded at 200 mm according to IEC/TR 62778		N
	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
1.6 (4.25)	Mechanical hazard		P
	No sharp point or edges		P
1.6 (4.26)	Short-circuit protection:		N
1.6 (4.26.1)	Adequate means of uninsulated accessible SELV parts		N
1.6 (4.26.2)	Short-circuit test with test chain according 4.26.3		N
	Test chain not melt through		N
	Test sample not exceed values of Table 12.1 and 12.2		N
1.6 (4.27)	Terminal blocks with integrated screwless earthing contacts tested according Annex V		N
	Pull test of terminal fixing (20 N)		N
	After test, resistance < 0,05 Ω		N
	Pull test of mechanical connection (50 N)		N
	After test, resistance < 0,05 Ω		N
	Voltage drop test, resistance < 0,05 Ω		N
1.6 (4.28)	Fixing of thermal sensing control		N
	Not plug-in or easily replaceable type		N
	Reliably kept in position		N
	No adhesive fixing if UV radiations from a lamp can degrade the fixing		N

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Not outside the luminaire enclosure		N
	Test of adhesive fixing:		N
	Max. temperature on adhesive material (°C)	--	—
	100 cycles between t min and t max		N
	Temperature sensing control still in position		N
1.6 (4.29)	Luminaires with non-replaceable light source		N
	Not possible to replace light source		N
	Live part not accessible after parts have been opened by hand or tools		N
1.6 (4.30)	Luminaires with non-user replaceable light source		N
	If protective cover provide protection against electric shock and marked with “caution, electric shock risk” symbol:		N
	Minimum two fixing means		N
1.6 (4.31)	Insulation between circuits		N
	Circuits insulated from LV supply fulfil requirements according 4.31.1 – 4.31.3		N
	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
1.6 (4.31.1)	SELV circuits		N
	Used SELV source		N
	Voltage ≤ ELV		N
	Insulating of SELV circuits from LV supply		N
	Insulating of SELV circuits from other non SELV circuits		N
	Insulating of SELV circuits from FELV		N
	Insulating of SELV circuits from other SELV circuits		N
	SELV circuits insulated from accessible parts according Table X.1		N
	Plugs not able to enter socket-outlets of other voltage systems		N
	Socket outlets does not admit plugs of other voltage systems		N
	Plugs and socket-outlets does not have protective conductor contact		N
1.6 (4.31.2)	FELV circuits		N
	Used FELV source		N
	Voltage ≤ ELV		N

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Insulating of FELV circuits from LV supply		N
	FELV circuits insulated from accessible parts according Table X.1		N
	Plugs not able to enter socket-outlets of other voltage systems		N
	Socket outlets does not admit plugs of other voltage systems		N
	Socket-outlets does not have protective conductor contact		N
1.6 (4.31.3)	Other circuits		N
	Other circuits insulated from accessible parts according Table X.1		N
	Class II construction with equipotential bonding for protection against indirect contacts with live parts:		N
	- conductive parts are connected together		N
	- test according 7.2.3 of above		N
	- conductive part not cause an electric shock in case of an insulation fault		N
	- equipotential bonding in master/slave applications		N
	- master luminaire provided with terminal for accessible conductive parts of slave luminaires		N
	- slave luminaire constructed as class I		N
1.6 (4.32)	Overvoltage protective devices		N
	Comply with IEC 61643-11		N
	External to control gear and connected to earth:		N
	- only in fixed luminaires		N
	- only connected to protective earth		N

1.7 (11)	CREEPAGE DISTANCES AND CLEARANCES		P
1.7 (11.2.1)	Impulse withstand category (Normal category II)	Category II ☒ Category III ☐	—
	Category III according Annex U		N
	Protected against pollution, reduced creepage and clearance according Annex P of IEC 61347-1		N
1.7 (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
	- 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
	- Requirements according IEC 60664-4 for controlgear not covered by IEC 61347	See Test Table 1.7 (11.2) II	N

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.7 (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
	- Controlgear marked with U_p	See Test Table 1.7 (11.2) II	N
	- Requirements according IEC 60664-4 for controlgear not covered by IEC 61347	See Test Table 1.7 (11.2) II	N
1.8 (7)	PROVISION FOR EARTHING		P
1.8 (7.2.1 + 7.2.3)	Accessible metal parts		P
	Metal parts in contact with supporting surface		P
	Resistance < 0.5 Ω	Max.0.032 Ω	P
	Self-tapping screws used		N
	Thread-forming screws		N
	Thread-forming screw used in a groove		N
	Earth makes contact first		N
1.8 (7.2.2 + 7.2.3)	Earth continuity in joints etc.		P
1.8 (7.2.4)	Locking of clamping means		P
	Compliance with 4.7.3		P
	Terminal blocks with integrated screwless earthing contacts tested according Annex V		N
1.8 (7.2.5)	Earth terminal integral part of connector socket		N
1.8 (7.2.6)	Earth terminal adjacent to mains terminals		P
1.8 (7.2.7)	Electrolytic corrosion of the earth terminal		N
1.8 (7.2.8)	Material of earth terminal		P
	Contact surface bare metal		P
1.8 (7.2.10)	Class II luminaire for looping-in		N
	Double or reinforced insulation to functional earth		N
1.8 (7.2.11)	Earthing core coloured green-yellow		P
	Length of earth conductor		N
1.9 (14)	SCREW TERMINALS		P
	Separately approved; component list	(see Annex 1)	N
	Part of the luminaire		P
1.9 (15)	SCREWLESS TERMINALS AND ELECTRICAL CONNECTIONS		P
	Separately approved; component list		P
	Part of the luminaire		N

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.10 (5)	EXTERNAL AND INTERNAL WIRING		P
1.10 (5.2)	Supply connection and external wiring		P
1.10 (5.2.1)	Means of connection..... : Supply cords with plugs for DOT03SW and DOT10SW Terminal block for other models		P
	Outdoor luminaire has not PVC insulated external wiring if not class III or SELV ≤ 25 V a.c./60 V d.c. or protected from outdoor environment		N
1.10 (5.2.2)	Type of cable : (see Annex 1)		P
	Nominal cross-sectional area (mm ²)..... : (see Annex 1)		P
	Cables equal to IEC 60227 or IEC 60245		P
1.10 (5.2.3)	Type of attachment, X, Y or Z	Type Y	P
1.10 (5.2.5)	Type Z not connected to screws		N
1.10 (5.2.6)	Cable entries:		P
	- suitable for introduction		P
	- adequate degree of protection		P
1.10 (5.2.7)	Cable entries through rigid material have rounded edges		N
1.10 (5.2.8)	Insulating bushings:		P
	- suitably fixed		P
	- material in bushings		P
	- material not likely to deteriorate		P
	- tubes or guards made of insulating material		P
1.10 (5.2.9)	Locking of screwed bushings		N
1.10 (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
1.10 (5.2.10.1)	Cord anchorage for type X attachment:		N
	a) at least one part fixed		N
	b) types of cable		N
	c) no damaging of the cable		N
	d) whole cable can be mounted		N
	e) no touching of clamping screws		N

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Clause	Requirement + Test	Result - Remark	Verdict
	f) metal screw not directly on cable		N
	g) replacement without special tool		N
	Glands not used as anchorage		N
	Labyrinth type anchorages		N
1.10 (5.2.10.2)	Adequate cord anchorage for type Y and type Z attachment	Type Y	P
1.10 (5.2.10.3)	Tests:		P
	- impossible to push cable; unsafe		P
	- pull test: 25 times; pull (N)..... : 60N		P
	- torque test: torque (Nm) : 0.25Nm		P
	- displacement ≤ 2 mm		P
	- no movement of conductors		P
	- no damage of cable or cord		P
1.10 (5.2.11)	External wiring passing into luminaire		P
1.10 (5.2.12)	Looping-in terminals		N
1.10 (5.2.13)	Wire ends not tinned		P
	Wire ends tinned: no cold flow		N
1.10 (5.2.14)	Mains plug same protection		P
	Class III luminaire plug		N
1.10 (5.2.16)	Appliance inlets (IEC 60320)		N
	Appliance couplers of class II type		N
1.10 (5.2.17)	No standardized interconnecting cables properly assembled		N
1.10 (5.2.18)	Used plug in accordance with		P
	- IEC 60083		N
	- other standard		P
1.10 (5.3)	Internal wiring		P
1.10 (5.3.1)	Internal wiring of suitable size and type	(see Annex 1)	P
	Through wiring		N
	- not delivered/ mounting instruction		N
	- factory assembled		N
	- socket outlet loaded (A)..... : --		N
	- temperatures : --		N
	Green-yellow for earth only		P
1.10 (5.3.1.1)	Internal wiring connected directly to fixed wiring		P

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Clause	Requirement + Test	Result - Remark	Verdict
	Cross-sectional area (mm ²) : (see Annex 1)		P
	Insulation thickness		P
	Extra insulation added where necessary		N
1.10 (5.3.1.2)	Internal wiring connected to fixed wiring via internal current-limiting device		N
	Adequate cross-sectional area and insulation thickness		N
1.10 (5.3.1.3)	Double or reinforced insulation for class II		N
1.10 (5.3.1.4)	Conductors without insulation		N
1.10 (5.3.1.5)	SELV current-carrying parts		N
1.10 (5.3.1.6)	Insulation thickness other than PVC or rubber	PVC	N
1.10 (5.3.2)	Sharp edges etc.		P
	No moving parts of switches etc.		N
	Joints, raising/lowering devices		P
	Telescopic tubes etc.		N
	No twisting over 360°		P
1.10 (5.3.3)	Insulating bushings:		P
	- suitable fixed		P
	- material in bushings		P
	- material not likely to deteriorate		P
	- cables with protective sheath		N
1.10 (5.3.4)	Joints and junctions effectively insulated		P
1.10 (5.3.5)	Strain on internal wiring		P
1.10 (5.3.6)	Wire carriers		N
1.10 (5.3.7)	Wire ends not tinned		P
	Wire ends tinned: no cold flow		N
1.10 (5.4)	Test to determine suitability of conductors having a reduced cross-sectional area		N
	Under test the temperature of the luminaire wiring insulation not exceed the limits stated in Table 12.2	(see Annex 2)	N
	No damage to luminaire wiring after test		N

1.11 (8)	PROTECTION AGAINST ELECTRIC SHOCK		P
1.11 (8.2.1)	Live parts not accessible with standard test finger		P
	Basic insulated parts not used on the outer surface without appropriate protection		P

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Clause	Requirement + Test	Result - Remark	Verdict
	Basic insulated parts not accessible with standard test finger on portable, settable and adjustable luminaires	For DOT01	P
	Basic insulated parts not accessible with Ø 50 mm probe from outside, other types of luminaires		P
	Lamp and starterholders in portable and adjustable luminaires comply with double or reinforced insulation requirements		N
	Basic insulation only accessible under lamp or starter replacement		P
	Protection in any position		P
	Double-ended tungsten filament lamp		N
	Insulation lacquer not reliable		N
	Double-ended high pressure discharge lamp		N
	Relevant warning according to 3.2.18 fitted to the luminaire		N
1.11 (8.2.2)	Portable luminaire adjusted in most unfavourable position		N
1.11 (8.2.3.a)	Class II luminaire:		N
	- basic insulated metal parts not accessible during starter or lamp replacement		N
	- basic insulation not accessible other than during starter or lamp replacement		N
	- glass protective shields not used as supplementary insulation		N
1.11 (8.2.3.b)	BC lampholder of metal in class I luminaires shall be earthed		N
1.11 (8.2.3.c)	SELV circuits with exposed current carrying parts:		N
	Ordinary luminaire:		N
	- voltage under load (V)	--	N
	- no-load voltage (V)	--	N
	- touch current if applicable (mA)	--	N
	One conductive part insulated if required		N
	Other than ordinary luminaire:		N
	- nominal voltage	--	N
	Class III luminaire only for connection to SELV		N
	Class III luminaire not provided with means for protective earthing		N
1.11 (8.2.4)	Portable luminaire have protection independent of supporting surface		N

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Clause	Requirement + Test	Result - Remark	Verdict
1.11 (8.2.5)	Compliance with the standard test finger or relevant probe		P
1.11 (8.2.6)	Covers reliably secured		P
1.11 (8.2.7)	Luminaire other than below with capacitor > 0,5 μ F not exceed 50 V 1 min after disconnection		N
	Portable luminaire with capacitor > 0,1 μ F (0.25) not exceed 34 V 1 s after disconnection		N
	Other luminaires with capacitor > 0,1 μ F (0.25) with plug and track adaptors not exceed 60 V 5 s after disconnection		N

1.12 (12)	ENDURANCE TEST AND THERMAL TEST		P
1.12 (-)	If IP > IP 20 relevant test of (12.4), (12.5) and (12.6) after (9.2) before (9.3) specified in 1.13		—
1.12 (12.2)	Selection of lamps and ballasts		—
	Lamp used according Annex B	(Lamp used see Annex 2)	—
	Controlgear if separate and not supplied		—
1.12 (12.3)	Endurance test:		P
	a) mounting-position	Acc. to user manual	—
	b) test temperature (°C)	35 °C	—
	c) total duration (h)	240 h	—
	d) supply voltage (V)	264V	—
	d) if not equipped with controlgear, constant voltage/current (V) or (A)	--	—
	e) luminaire ceases to operate		—
1.12 (12.3.2)	After endurance test:		P
	- no part unserviceable		P
	- luminaire not unsafe		P
	- no damage to track system		N
	- marking legible		P
	- no cracks, deformation etc.		P
1.12 (12.4)	Thermal test (normal operation)	(see Annex 2)	P
1.12 (12.5)	Thermal test (abnormal operation)	(see Annex 2)	N
1.12 (12.6)	Thermal test (failed lamp control gear condition):		N
1.12 (12.6.1)	Through wiring or looping-in wiring loaded by a current of (A)	---	—
	- case of abnormal conditions.....	---	—

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Clause	Requirement + Test	Result - Remark	Verdict
	- electronic lamp control gear		N
	- measured winding temperature (°C): at 1,1 Un .. : ---		—
	- measured mounting surface temperature (°C) at 1,1 Un : ---		N
	- calculated mounting surface temperature (°C) .. : ---		N
	- track-mounted luminaires		N
1.12 (12.6.2)	Temperature sensing control		N
	- case of abnormal conditions..... : ---		—
	- thermal link		N
	- manual reset cut-out		N
	- auto reset cut-out		N
	- measured mounting surface temperature (°C)... : ---		N
	- track-mounted luminaires		N
1.12 (12.7)	Thermal test (failed lamp control gear in plastic luminaires):		N
1.12 (12.7.1)	Luminaire without temperature sensing control		N
1.12 (12.7.1.1)	Luminaire with fluorescent lamp ≤ 70W		N
	Test method 12.7.1.1 or Annex V : ---		—
	Test according to 12.7.1.1:		N
	- case of abnormal conditions		—
	- Ballast failure at supply voltage (V) : ---		—
	- Components retained in place after the test		N
	- Test with standard test finger after the test		N
	Test according to Annex V:		N
	- 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:		N
	- part tested; temperature (°C)..... : ---		N
	- part tested; temperature (°C)..... : ---		N
1.12 (12.7.1.2)	Luminaire with discharge lamp, fluorescent lamp > 70W, transformer > 10 VA		N
	- case of abnormal conditions		—

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Clause	Requirement + Test	Result - Remark	Verdict
	- 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:		N
	- part tested; temperature (°C)..... :	---	N
	- part tested; temperature (°C)..... :	---	N
1.12 (12.7.1.3)	Luminaire with short circuit proof transformers ≤ 10 VA		N
	- case of abnormal conditions		—
	- Components retained in place after the test		N
	- Test with standard test finger after the test		N
1.12 (12.7.2)	Luminaire with temperature sensing control		N
	- 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:		N
	- part tested; temperature (°C)..... :	---	N
	- part tested; temperature (°C)..... :	---	N
	Ball-pressure test:.....	See Table 1.15 (13.2.1)	N

1.13 (9)	RESISTANCE TO DUST, SOLID OBJECTS AND MOISTURE		P
1.13 (9.2)	Tests for ingress of dust, solid objects and moisture:		P
	- classification according to IP	IP20	—
	- mounting position during test	Acc. to user manual	—
	- fixing screws tightened; torque (Nm).....	--	—
	- tests according to clauses	9.2.0	—
	- electric strength test afterwards		P
	a) no deposit in dust-proof luminaire		N
	b) no talcum in dust-tight luminaire		N
	c) no trace of water on current-carrying parts or SELV parts or where it could become a hazard		N

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Clause	Requirement + Test	Result - Remark	Verdict
	c.1) For luminaires without drain holes – no water entry		N
	c.2) For luminaires with drain holes – no hazardous water entry		N
	d) no water in watertight or pressure watertight luminaire		N
	e) no contact with live parts (IP 2X)	IP20	P
	e) no entry into enclosure (IP 3X and IP 4X)		N
	e) no contact with live parts through drain holes and ventilation slots (IP3X and IP4X)		N
	f) no trace of water on part of lamp requiring protection from splashing water		N
	g) no damage of protective shield or glass envelope		N
1.13 (9.3)	Humidity test 48 h	25°C, 93%R.H.	P

1.14 (10)	INSULATION RESISTANCE AND ELECTRIC STRENGTH		P
1.14 (10.2.1)	Insulation resistance test		P
	Cable or cord covered by metal foil or replaced by a metal rod of mm Ø		---
	Insulation resistance (MΩ)		---
	SELV:		N
	- between current-carrying parts of different polarity	---	N
	- between current-carrying parts and mounting surface	---	N
	- between current-carrying parts and metal parts of the luminaire	---	N
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts	---	N
	- Insulation bushings as described in Section 5 ..	---	N
	Other than SELV:		P
	- between live parts of different polarity	100 MΩ	P
	- between live parts and mounting surface	100 MΩ	P
	- between live parts and metal parts	100 MΩ	P
	- between live parts of different polarity through action of a switch	---	N
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts	100 MΩ	P
	- Insulation bushings as described in Section 5 ..	100 MΩ	P

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Clause	Requirement + Test	Result - Remark	Verdict
1.14 (10.2.2)	Electric strength test		P
	Dummy lamp		N
	Luminaires with ignitors after 24 h test		N
	Luminaires with manual ignitors		N
	Test voltage (V):		P
	SELV:		N
	- between current-carrying parts of different polarity	---	N
	- between current-carrying parts and mounting surface	---	N
	- between current-carrying parts and metal parts of the luminaire	---	N
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts	---	N
	- Insulation bushings as described in Section 5 ..	---	N
	Other than SELV:		P
	- between live parts of different polarity	1480V	P
	- between live parts and mounting surface	1480V	P
	- between live parts and metal parts	1480V	P
	- between live parts of different polarity through action of a switch	--	N
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts	1480V	N
	- Insulation bushings as described in Section 5 ..	1480V	P
1.14 (10.3)	Touch current or protective conductor current (mA)	Max. 1.1mA (protective conductor current)	P

1.15 (13)	RESISTANCE TO HEAT, FIRE AND TRACKING		P
1.15 (13.2.1)	Ball-pressure test	See Test Table 1.15 (13.2.1)	N
1.15 (13.3.1)	Needle-flame test (10 s)	See Test Table 1.15 (13.3.1)	N
1.15 (13.3.2)	Glow-wire test (650°C)	See Test Table 1.15 (13.3.2)	P
1.15 (13.4)	Proof tracking test (IEC 60112)	See Test Table 1.15 (13.4)	N

IEC 60598-2-1							
Clause	Requirement + Test				Result - Remark		Verdict
1.7 (11.2)	TABLE: Creepage distances and clearances						P
	Minimum distances (mm) for a.c. (50/60 Hz) sinusoidal voltages						P
	Applicable part of IEC 60598-1 Table 11.1* and 11.2*						P
	Insulation type **	Measured clearance	Required		Measured creepage	Required	
			clearance	*Table		creepage	*Table
Distance 1:	B	3.0	1.5	11.1	3.0	2.5	11.1
Working voltage (V).....:					240VAC		—
PTI.....:					< 600 ☒ ≥ 600 ☐		—
Pulse voltage if applicable (kV)					--		—
Supplementary information: Live parts of different polarity							
Distance 2:	B	2.8	1.5	11.1	2.8	2.5	11.1
Working voltage (V).....:					240VAC		—
PTI.....:					< 600 ☒ ≥ 600 ☐		
Pulse voltage if applicable (kV)					--		
Supplementary information: Outer surface of cable where it is clamped and metal parts							
Distance 3:	B	3.2	1.5	11.1	3.2	2.5	11.1
Working voltage (V).....:					240VAC		—
PTI.....:					< 600 ☒ ≥ 600 ☐		
Pulse voltage if applicable (kV)					--		
Supplementary information: Current-carrying parts and earth metal parts							
Distance 4:	B	3.2	1.5	11.1	3.2	2.5	11.1
Working voltage (V).....:					240VAC		—
PTI.....:					< 600 ☒ ≥ 600 ☐		—
Pulse voltage if applicable (kV)					--		—
Supplementary information: Current-carrying parts and mounting surface							

** 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
1.7 (11.2)	TABLE II: Creepage distances and clearances						N
Minimum distances (mm) for a.c. higher than 30 kHz sinusoidal voltages							
Applicable part of IEC 61347-1 Table 7 and 8* or IEC 60664-4 Table 1 and 2							
Distances	Insulation type **	Measured clearance	Required		Measured creepage	Required	
			clearance	*Table		creepage	*Table
Distance 1:							
Working voltage (V).....:							—
Frequency if applicable (kHz).....:							—
PTI					< 600 ☐ ≥ 600 ☐		—
Peak value of the working voltage $\hat{U}_{out}$ if applicable (kV)							—
Supplementary information:							
Distance 2:							
Working voltage (V).....:							—
Frequency if applicable (kHz).....:							—
PTI					< 600 ☐ ≥ 600 ☐		—
Peak value of the working voltage $\hat{U}_{out}$ if applicable (kV)							—
Supplementary information:							
Distance 3:							
Working voltage (V).....:							—
Frequency if applicable (kHz).....:							—
PTI					< 600 ☐ ≥ 600 ☐		—
Peak value of the working voltage $\hat{U}_{out}$ if applicable (kV)							—
Supplementary information:							

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

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

1.15 (13.2.1)	TABLE: Ball Pressure Test of Thermoplastics			N
Allowed impression diameter (mm)		≤2.0		—
Object/ Part No./ Material	Manufacturer/ trademark	Test temperature (°C)	Impression diameter (mm)	
--	--	--	--	
Supplementary information:				

1.15 (13.3.1)	TABLE: Needle-flame test (IEC 60695-11-5)				N
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
--	--	--	--	--	--
Supplementary information:--					

1.15 (13.3.2)	TABLE: Glow-wire test (IEC 60695-2-11)					P
Glow wire temperature					650°C	—
Object/ Part No./ Material	Manufacturer/ trademark	Duration of application of test glow (ta); (s)	Ignition of specified layer Yes/No	Duration of burning (tb) (s)	Verdict	
Dome of G9 lampholder	See annex 1	30	No	0	P	
Any flame or glowing of the sample extinguished within 30 s of withdrawing the glow-wire, and any burning or molten drop did not ignite the underlying parts (Yes/No)					Yes	
Supplementary information:--						

1.15 (13.4)	TABLE: Proof tracking test (IEC 60112)				N
Test voltage PTI :		175V			—
Object/ Part No./ Material	Manufacturer/ trademark	Withstand 50 drops without failure on three places or on three specimens			Verdict
--	--	--	--	--	--
Supplementary information:--					

IEC 60598-2-1						
Clause	Requirement + Test			Result - Remark		Verdict
	ANNEX 1 components					P
object/part No.	code	manufacturer/ trademark	type/model	technical data	standard	mark(s) of conformity
Plug for DOT03SW & DOT10SW (AU)	B	Legrand Australia Pty Ltd	100LCL	AC250V,10A	AS/NZS 3112	ESO170033/ 00
Plug for DOT03SW & DOT10SW (EU)	B	Heinrich Kopp GmbH	1785	AC250V,16A	VDE 0620-1	VDE 40018408
Power cord for DOT03SW & DOT10SW(AU)	B	Yun Hao Electrical Maunfacuring Co., Ltd	H03VV-F	3x0.75mm ²	AS/NZS 60227.5	NSW 24539
Power cord for DOT03SW & DOT10SW (EU)	B	Norbert Kordes Kabel und Leitungen GmbH u. Co. KG	H03VV-F H05VV-F	3 x 0.75 mm ²	EN 50525-2- 11	VDE 101691
Suspension cord for DOT11, DOT02	B	Ningbo Jiajie Electronic Co., Ltd.	H03VV-F H05VV-F	3x0,75mm ²	VDE 0285- 525-2-11	VDE 40028223
Alternative	D	CABLES RCT, S.A.U.	H03VV-F	3 x 0.75 mm ²	EN 50525-2- 11	HAR/000650
Terminal block for DOT03HW, DOT07, DOT10HW,D OT011, DOT01 & DOT02	B	WAGO Kontakttechnik GmbH & Co. KG	221-412 221-413 221-415	450V;0.75mm ² ; T85	EN 60998-1 EN 60998-2-1	DEKRA 71- 101731
Lead wire of lampholder for all models except for DOT03SW & DOT02, Internal wire in vertical metal tube and canopy for DOT01	B	OMERIN SAS Z.I. - rue Marc Seguin	CN5YS	300/500V; 180°C; 0.5 mm ²	VDE 0250	VDE 40005809
Alternative	D	Huber+Suhner	RADOX 125	0.75 mm ² ; 120°C	--	CE
Earth wire for all models except for DOT03SW.	B	HEW-KABEL GmbH	TE-CU.../E	300/500V	VDE 0250	VDE 100698

IEC 60598-2-1						
Clause	Requirement + Test			Result - Remark		Verdict
Alternative	D	Huber+Suhner	RADOX 125	0.75 mm ² ; 120°C	--	CE
Switch for DOT 03SW, DOT 10SW (AU)	B	Vask Components Hong Kong Company	KS2	250VAC, 2 ⊗ 1A; 1E4; T55	AS/NZS 3127 AS/NZS 3100	TPE20247
Switch for DOT 03SW, DOT 10SW (EU)	B	L.C. RELCO SPA	478	AC250V, 1A, 1E4, T55	EN 6058-1	IMQ CA02.04831
G9 lampholder	B	Guangdong Kangrong High-Tech New Material Co., Ltd	K540K	250VAC; 2A; T250	EN 60238	SE/09131-40A
Dome of G9 lampholder	D	NANTONG ORIENT PLASTICS CO LTD	3080 G(zz)	V-0; PBT		UL E332375
Heat-shrinkage tube	B	SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO LTD	RSFR-H	600V; 125°C	--	UL E203950
Fiberglass sleeving	B	TECHFLEX INC	Grade A Grade C	600V, 155°C	--	UL E329693

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	Temperature measurements, thermal tests of Section 12	P
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ANNEX 2-1	Type reference.....	DOT03SW	—
	Lamp used	G9 1x6W LED bulb	—
	Lamp control gear used	--	—
	Mounting position of luminaire.....	Acc. to user manual	—
	Supply wattage (W)	--	—
	Supply current (A).....	--	—
	Calculated power factor.....	--	—
	Table: measured temperatures corrected for t _a = 25 °C:		P
	- abnormal operating mode	--	—
	- test 1: rated voltage	--	—
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage	1.06 times rated voltage	—
	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage.....	--	—
	- test 4: 1,1 times rated voltage or 1,05 times rated wattage	--	—

IEC 60598-2-1							
Clause	Requirement + Test				Result - Remark		Verdict
	Through wiring or looping-in wiring loaded by a current of A during the test:				--		—
	Temperature measurements, (°C)						
Part	Ambient	Clause 12.4 – normal				Clause 12.5 – abnormal	
		test 1	test 2	test 3	limit	test 4	limit
Power cord	25.0	--	28.5	--	90	--	--
Lampholder contact	25.0	--	72.4	--	250	--	--
Lampholder lead wire	25.0	--	58.9	--	90	--	--
Switch button	25.0	--	28.2	--	55	--	--
Ambient of switch	25.0	--	27.9	--	55	--	--
Mounting surface (flammable surface)	25.0	--	27.5	--	90	--	--
Lighting object (10cm)	25.0	--	32.0	--	90	--	--

IEC 60598-2-1							
Clause	Requirement + Test				Result - Remark		Verdict
ANNEX 2-2	Type reference.....:				DOT10SW		—
	Lamp used				G9 5 x 6W LED bulb		—
	Lamp control gear used				--		—
	Mounting position of luminaire.....:				Acc. to user manual		—
	Supply wattage (W)				--		—
	Supply current (A).....:				--		—
	Calculated power factor.....:				--		—
	Table: measured temperatures corrected for ta = 25 °C:						P
	- abnormal operating mode				--		—
	- test 1: rated voltage.....:				--		—
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage				1.06 times rated voltage		—
	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage.....:				--		—
	- test 4: 1,1 times rated voltage or 1,05 times rated wattage				--		—
	Through wiring or looping-in wiring loaded by a current of A during the test				--		—
	Temperature measurements, (°C)						
Part	Ambient	Clause 12.4 – normal				Clause 12.5 – abnormal	
		test 1	test 2	test 3	limit	test 4	limit
Power cord	25.0	--	28.1	--	90	--	--
Lampholder contact	25.0	--	71.8	--	250	--	--
Lampholder lead wire	25.0	--	56.6	--	180	--	--
Switch button	25.0	--	27.9	--	55	--	--
Ambient of switch	25.0	--	27.5	--	55	--	--
Mounting surface (flammable surface)	25.0	--	28.3	--	90	--	--
Lighting object (10cm)	25.0	--	34.0	--	90	--	--

ANNEX 2-3	Type reference.....				DOT01		—
	Lamp used				G9 12x6W LED bulb		—
	Lamp control gear used.....				--		—
	Mounting position of luminaire.....				Acc. to user manual		—
	Supply wattage (W)				--		—

IEC 60598-2-1							
Clause	Requirement + Test				Result - Remark		Verdict
	Supply current (A).....				--		—
	Calculated power factor				--		—
	Table: measured temperatures corrected for ta = 25 °C:						P
	- abnormal operating mode				--		—
	- test 1: rated voltage				--		—
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage				1.06 times rated voltage		—
	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage.....				--		—
	- test 4: 1,1 times rated voltage or 1,05 times rated wattage				--		—
	Through wiring or looping-in wiring loaded by a current of A during the test				--		—
	Temperature measurements, (°C)						
Part	Ambient	Clause 12.4 – normal				Clause 12.5 – abnormal	
		test 1	test 2	test 3	limit	test 4	limit
Fixing wiring	25.0	--	27.7	--	90	--	--
Terminal block	25.0	--	27.6	--	85	--	--
Earth wire	25.0	--	27.9	--	90	--	--
Internal wire	25.0	--	34.7	--	180	--	--
G9 Lampholder contact	25.0	--	80.1	--	250	--	--
Dome of lampholder	25.0	--	37.9	--	210	--	--
Lampholder lead wires	25.0	--	50.8	--	180	--	--
Adjusting part (and 5cm surrounding, metal)	25.0	--	36.4	--	60	--	--
Mounting surface (flammable surface)	25.0	--	26.9	--	90	--	--
Lighting object (10cm)	25.0	--	29.9	--	90	--	--
ANNEX 2-4	Type reference.....				DOT02		—
	Lamp used				G9 1x6W LED bulb		—
	Lamp control gear used				--		—
	Mounting position of luminaire.....				Acc. to user manual		—
	Supply wattage (W)				--		—

IEC 60598-2-1							
Clause	Requirement + Test				Result - Remark		Verdict
	Supply current (A).....				--		—
	Calculated power factor				--		—
	Table: measured temperatures corrected for ta = 25 °C:						P
	- abnormal operating mode				--		—
	- test 1: rated voltage				--		—
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage				1.06 times rated voltage		—
	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage.....				--		—
	- test 4: 1,1 times rated voltage or 1,05 times rated wattage				--		—
	Through wiring or looping-in wiring loaded by a current of A during the test				--		—
	Temperature measurements, (°C)						
Part	Ambient	Clause 12.4 – normal				Clause 12.5 – abnormal	
		test 1	test 2	test 3	limit	test 4	limit
Fixing wiring	25.0	--	26.1	--	90	--	--
Terminal block	25.0	--	25.3	--	85	--	--
Earth wire	25.0	--	43.4	--	90	--	--
G9 Lampholder contact	25.0	--	76.8	--	250	--	--
Dome of lampholder	25.0	--	35.3	--	210	--	--
Lampholder lead wires	25.0	--	45.6	--	120	--	--
pressed of power cord	25.0	--	32.7	--	75	--	--
Mounting surface (flammable surface)	25.0	--	25.9	--	90	--	--
Lighting object (10cm)	25.0	--	27.8	--	90	--	--

ANNEX 2-5	Type reference.....	DOT11	—
	Lamp used	G9 5x6W LED bulb	—
	Lamp control gear used	--	—
	Mounting position of luminaire.....	Acc. to user manual	—
	Supply wattage (W)	--	—
	Supply current (A).....	--	—
	Calculated power factor.....	--	—

IEC 60598-2-1							
Clause	Requirement + Test				Result - Remark		Verdict
	Table: measured temperatures corrected for ta = 25 °C:						P
	- abnormal operating mode				--		—
	- test 1: rated voltage				--		—
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage				1.06 times rated voltage		—
	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage.....				--		—
	- test 4: 1,1 times rated voltage or 1,05 times rated wattage				--		—
	Through wiring or looping-in wiring loaded by a current of A during the test				--		—
	Temperature measurements, (°C)						
Part	Ambient	Clause 12.4 – normal				Clause 12.5 – abnormal	
		test 1	test 2	test 3	limit	test 4	limit
Fixing wiring	25.0	--	26.3	--	90	--	--
Terminal block	25.0	--	25.8	--	85	--	--
Earth wire	25.0	--	44.8	--	90	--	--
Internal wire	25.0	--	37.5	--	180	--	--
G9 Lampholder contact	25.0	--	80.1	--	250	--	--
Dome of lampholder	25.0	--	36.5	--	210	--	--
Lampholder lead wires	25.0	--	48.1	--	180	--	--
pressed of power cord	25.0	--	32.3	--	75	--	--
Mounting surface (flammable surface)	25.0	--	26.1	--	90	--	--
Lighting object (10cm)	25.0	--	28.3	--	90	--	--

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

ANNEX 3	Screw terminals (part of the luminaire)	P
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(14)	SCREW TERMINALS		P
(14.2)	Type of terminal	pillar terminal	—
	Rated current (A)	Max.10A	—
(14.3.2.1)	One or more conductors		N
(14.3.2.2)	Special preparation		N
(14.3.2.3)	Terminal size		P
	Cross-sectional area (mm ²)	0,75-1,5mm ²	P
(14.3.3)	Conductor space (mm)		N
(14.4)	Mechanical tests		P
(14.4.1)	Minimum distance	2,72mm	P
(14.4.2)	Cannot slip out		P
(14.4.3)	Special preparation		N
(14.4.4)	Nominal diameter of thread (metric ISO thread)...	M3	P
	External wiring		N
	No soft metal		P
(14.4.5)	Corrosion		P
(14.4.6)	Nominal diameter of thread (mm)	2.71mm	P
	Torque (Nm).....	0,4Nm	P
(14.4.7)	Between metal surfaces		P
	Lug terminal		N
	Mantle terminal		N
	Pull test; pull (N).....	40N	P
(14.4.8)	Without undue damage		P

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
ANNEX 4	Screwless terminals (part of the luminaire)		N
(15)	SCREWLESS TERMINALS		—
(15.2)	Type of terminal: ----		—
	Rated current (A): ----		—
(15.3.1)	Material		N
(15.3.2)	Clamping		N
(15.3.3)	Stop		N
(15.3.4)	Unprepared conductors		N
(15.3.5)	Pressure on insulating material		N
(15.3.6)	Clear connection method		N
(15.3.7)	Clamping independently		N
(15.3.8)	Fixed in position		N
(15.3.10)	Conductor size		N
	Type of conductor		N
(15.5.1)	Terminals internal wiring		N
(15.5.1.1)	Pull test spring-type terminals (4 N, 4 samples).....: ---		N
(15.5.1.2)	Pull test pin or tab terminals (4 N, 4 samples).....: ---		N
	Insertion force not exceeding 50 N		N
(15.5.2)	Permanent connections: pull-off test (20 N)		N
(15.6)	Electrical tests		
	Voltage drop (mV) after 1 h (4 samples).....: ---		N
	Voltage drop of two inseparable joints		N
	Number of cycles: ---		—
	Voltage drop (mV) after 10th alt. 25th cycle (4 samples): ---		N
	Voltage drop (mV) after 50th alt. 100th cycle (4 samples): ---		N
	After ageing, voltage drop (mV) after 10th alt. 25th cycle (4 samples): ---		N
	After ageing, voltage drop (mV) after 50th alt. 100th cycle (4 samples): ---		N
(15.7)	Terminals external wiring		N
	Terminal size and rating		N
(15.8.1)	Pull test spring-type terminals or welded connections (4 samples); pull (N): ---		N

IEC 60598-2-1										
Clause	Requirement + Test					Result - Remark				Verdict
	Pull test pin or tab terminals (4 samples); pull (N):					---				N
(15.9)	Contact resistance test									N
	Voltage drop (mV) after 1 h									N
terminal	1	2	3	4	5	6	7	8	9	10
voltage drop (mV)	---	---	---	---	---	---	---	---	---	---
	Voltage drop of two inseparable joints					---				N
	Voltage drop after 10th alt. 25th cycle									N
	Max. allowed voltage drop (mV) :					---				—
terminal	1	2	3	4	5	6	7	8	9	10
voltage drop (mV)	---	---	---	---	---	---	---	---	---	---
	Voltage drop after 50th alt. 100th cycle									N
	Max. allowed voltage drop (mV) :					---				—
terminal	1	2	3	4	5	6	7	8	9	10
voltage drop (mV)	---	---	---	---	---	---	---	---	---	---
	Continued ageing: voltage drop after 10th alt. 25th cycle									N
	Max. allowed voltage drop (mV) :					---				—
terminal	1	2	3	4	5	6	7	8	9	10
voltage drop (mV)	---	---	---	---	---	---	---	---	---	---
	Continued ageing: voltage drop after 50th alt. 100th cycle									N
	Max. allowed voltage drop (mV) :					---				—
terminal	1	2	3	4	5	6	7	8	9	10
voltage drop (mV)	---	---	---	---	---	---	---	---	---	---

Australia deviation			
Clause	Requirement + Test	Result - Remark	Verdict
ANNEX 5	Australian deviation (AU variations of AS/NZS 60598.1:2017 to IEC 60598-1:2014)		P
	APPENDIX ZZ		—
	VARIATIONS TO IEC 60598-1, Ed. 8.0 (2014) FOR AUSTRALIA AND NEW ZEALAND		
0	GENERAL INTRODUCTION		P
0.1	Add: Where the term “lamp” is used in this Standard, it is taken to include electric light sources. LED light sources are subject to the same test parameters as “other discharge lamps”.		N
	NOTE Portable rechargeable battery operated luminaires should comply with Annex B, ‘Appliances powered by rechargeable batteries’ of AS/NZS 60335.1, Household and similar electrical appliances—Safety, Part 1: General requirements (IEC 60335-1 ED. 5, MOD). In addition, portable, rechargeable, battery-operated luminaires with lithium ion batteries should have overvoltage protection.		—
0.4.2	Add: In Australia, for equipment, other than class III equipment, that is intended for connection to the supply mains and not marked with: - a rated voltage of at least 240 V for single-phase equipment or a rated voltage of at least 415 V for three-phase equipment; or - a rated voltage range that includes 240 V for single-phase equipment and 415 V for three-phase equipment, the rated voltage is equal to 240 V for single-phase equipment and 415 V for three-phase equipment, and the upper limit of the voltage range is equal to 240 V for single-phase equipment and 415 V for three-phase equipment.		P
0.5	Add: Relevant Australian/New Zealand Standard replaces the IEC Standard unless otherwise specified.		P
0.5.101	Add: Capacitors		N
	Capacitors shall be of a type to ensure that any capacitor failure results in a failsafe outcome.		N

Australia deviation			
Clause	Requirement + Test	Result - Remark	Verdict
	Capacitors (other than those incorporated in control gear that comply with the relevant standard) shall comply with one of the following: - Capacitors likely to be permanently subjected to the supply voltage, used for radio interference suppression or for voltage dividing shall comply with IEC 60384-14. - Other capacitors shall be not less than Type B capacitors with metal body and break action protection in accordance with IEC 61048 and IEC 61049. A capacitor complying with EIA-456-A, Metallized Film Dielectric Capacitors for Alternating Current Applications, shall comply with IEC 61049 and IEC 61048:2006 excluding the endurance test of 18.1.1.		N
	In addition, capacitors shall have a minimum voltage rating of 250 V at a temperature rating of 100 °C or 280 V at a temperature rating of 85 °C.		N
0.5.102	Add: Control gear		N
	Power supplies shall comply with the relevant part 2 of the AS/NZS 61558 series.		N
	Control gear shall comply with the relevant part 2 of the AS/NZS 61347 series.		N
	Battery chargers used for lighting other than emergency lighting shall comply with AS/NZS 60335.2.29.		N
	Sensor switches and similar control circuits, including those incorporated in other equipment, are considered electronic switches (see Clause 4.8).		N

2	CLASSIFICATION OF LUMINAIRES		P
2.2	Class 0 luminaires are not permitted in Australia or New Zealand.		—

3	MARKING		P
3.1	In Australia and New Zealand, instructions and other texts required by this Standard shall at least be written in English.		P
3.2	Delete the second paragraph beginning with 'Marking may be on ballast provided...'. Move Item 3.2.21 from the second column to the third column.		P
Table 3.1	3.2.21 The relevant symbol for luminaires not suitable for covering with thermally insulating material		P

Australia deviation			
Clause	Requirement + Test	Result - Remark	Verdict
3.2.3	The rated maximum ambient temperature t_a. (see Figure 1).		P
3.2.12	Add: In Australia, luminaires for household use and similar with supply cords which are not fitted with a plug shall be marked with a cord tag with the symbol for "must be installed by a licensed electrician".		N
3.2.23	Add: The additional information shall include the symbol "Do not stare at the operating light source" (see Figure 1) along with an explanation of the symbol.		N
3.3.7	Delete Clause and replace with: Luminaires for use with metal halide lamps shall be provided with instructions that state the substance of the following: To avoid potential unsafe lamp failure, the luminaire shall be switched off for at least 10 minutes at least once a week. In addition, the luminaire shall be operated: - complete with its protective shield; or - with a double jacketed lamp.		N
3.3.18	Delete the text ', i.e. for indoor use only'.		N
3.3.21	Delete the text 'Caution, risk of electric shock' and the symbol.		N
3.3.101	The instructions shall contain details of the components in the luminaire that require replacement as part of a maintenance program.		N
3.3.102	The instructions for luminaires, including for remotes or other accessories containing coin/button cell batteries and batteries designated R1 , shall include the safety warnings below.		N
	<i>The safety warnings are not required where these batteries are not intended to be replaced or are only accessible after damaging the equipment.</i>		—

Australia deviation			
Clause	Requirement + Test	Result - Remark	Verdict
	The safety warnings: – CAUTION: Do not ingest battery—Chemical burn hazard [or equivalent wording]. – [The remote control supplied with] this product contains a coin/button cell battery. If the coin/button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death. – Keep new and used batteries away from children. – If the battery compartment does not close securely, stop using the product and keep it away from children. – If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.		N

4	CONSTRUCTION		P
4.7.2	Delete the first paragraph and replace with the following: Terminals shall be located or shielded in such a way that, if a wire of a stranded conductor escapes from a terminal when the conductors are fitted, there is no risk of contact between live parts and metal parts that can be touched with the standard test finger, nor shall it be possible to touch a live free wire with the standard test finger when the luminaire is fully assembled for use or open for the replacement of replaceable light sources or starters.		N
4.8	Add: Switches shall comply with AS/NZS 3133, the AS/NZS 60669 series or AS/NZS 61058.1. Switches that indicate an off position shall have contacts with an air break and comply with AS/NZS 3133, AS/NZS 60669.1 or AS/NZS 61058.1.		P
	Electronic switches, when incorporated in or supplied with the luminaire, shall comply with the requirements of AS/NZS 60669.2.1 or IEC 61058-1 classified for 10,000 operating cycles		N
4.10.4	Delete the last sentence and replace with the following:: If the working voltage does not exceed the rated voltage of the capacitor, accessible conductive parts separated from live parts by double or reinforced insulation, as above, may be bridged by a single Y1 capacitor with qualification approval as specified in IEC 60384-14.		N
4.14.6	Add: A fixed socket-outlet complying with AS/NZS 3112 or AS/NZS 60884.1 is used for the test.		N

Australia deviation			
Clause	Requirement + Test	Result - Remark	Verdict
4.32	Add: Metal oxide varistors shall comply with the requirements of AS/NZS 3100 for metal oxide varistors incorporated in accessories.		N
4.101.1	Small batteries		N
	Batteries that fit wholly within the small parts cylinder as specified in Clause 5.2 of ISO 8124-1 shall not be removable without the aid of a tool.		N
	Luminaires intended for children under the age of three , or parts of such luminaires that contain batteries, shall not fit wholly within the small parts cylinder as specified in Clause 5.2 of ISO 8124-1.		N
	For luminaires or parts of luminaires containing batteries that fit wholly within the small parts cylinder as specified in Clause 5.2 of ISO 8124-1, the batteries shall not be accessible without the aid of a tool.		N
	Compliance is checked by inspection and by the following test:		—
	A force is applied without jerks for 10 s in the most unfavourable direction to parts likely to be weak. The force is as follows: – push force, 50 N; – pull force; 30 N; – if the shape of the part is such that the fingertips cannot easily slip off, 50 N; – if the projection of the part that is gripped is less than 10 mm in the direction of removal, 30 N. While the force is being applied, the test fingernail of Figure 7 of AS/NZS 60335.1 is inserted in any aperture or joint with a force of 10 N. The fingernail is then slid sideways with a force of 10 N but is not twisted or used as a lever.		N
	If the shape of the part is such that an axial pull is unlikely, the pull force is not applied but the test fingernail is inserted in any aperture or joint with a force of 10 N and is then pulled for 10 s by means of the loop with a force of 30 N in the direction of removal.		N
	If the part is likely to be twisted, the following torque is applied at the same time as the pull or push force: – 2 Nm, for major dimensions up to 50 mm. – 4 Nm, for major dimensions over 50 mm. This torque is also applied when the test fingernail is pulled by means of the loop. If the projection of the part that is gripped is less than 10 mm, the torque is reduced by 50 %.....:	4 Nm	N
4.101.1	Battery compartment fasteners		N

Australia deviation			
Clause	Requirement + Test	Result - Remark	Verdict
	If screws or similar fasteners are used to secure a door or cover providing access to the battery compartment, the screw or similar fastener shall be captive to ensure that it remains with the door, cover or equipment.		N
	Compliance is checked by inspection and by the following test:		—
	A force of 20 N is applied to the screw or similar fastener without jerks for a duration of 10 s in any direction.		N

5	EXTERNAL AND INTERNAL WIRING		P
5.2.1	First paragraph replaced by: Luminaires shall be provided with only one of the following means of connection and isolation to the supply. Fixed luminaires: – device for the connection of luminaires; – terminals; – plug for engagement with socket-outlets; – connecting leads (tails) in accordance with Clause 4.6 requirements; – supply cord; – supply cord and plug; – adapter for engagement with supply tracks; – appliance inlet; – installation coupler; – luminaire coupler. Portable luminaires: – supply cord with plug; – appliance inlet; – inlet plug complying with AS/NZS 3120. Track-mounted luminaires: — adaptor; — connector.		P
	Delete the second and third paragraph.		—
	In Australia, non-portable luminaires with a supply cord shall be fitted with a plug complying with AS/NZS 3112 or a coupler complying with the relevant standard, except where the luminaire has markings and instructions that comply with Clause 3.2.12, in which case, a plug or coupler is not required. For other than portable luminaires a plug is not required if the luminaire has markings and instructions in accordance with Clause 3.2.12.		P
	The plug portion of a luminaire with integral pins shall comply with the relevant requirements of AS/NZS 3112.		N
	<i>NOTE 4 PVC-insulated connection cords should not be used with outdoor luminaires in cold alpine locations.</i>		—

Australia deviation																												
Clause	Requirement + Test	Result - Remark	Verdict																									
5.2.2	First paragraph replaced by: Supply cords used as a means of connection to the supply, when supplied by the luminaire manufacturer, shall be at least equal in their mechanical and electrical properties to those specified in IEC 60227 and IEC 60245, as indicated in Table 5.1, or AS/NZS 3191, and shall be capable of withstanding, without deterioration, the highest temperature to which they may be exposed under normal conditions of use.		P																									
	Table 5.1 — Supply cord <table border="1"> <thead> <tr> <th>Luminaire</th><th>Rubber</th><th>PVC</th><th>No insulation</th></tr> </thead> <tbody> <tr> <td>Ordinary class I luminaires</td><td>60245 IEC 51S ^c</td><td>60227 IEC 52 ^c</td><td></td></tr> <tr> <td>Ordinary class II luminaires</td><td>60245 IEC 53 ^c</td><td>60227 IEC 52 ^c</td><td></td></tr> <tr> <td>Luminaires which are other than ordinary class I and II</td><td>60245 IEC 57 ^c</td><td>60227 IEC 53 ^{ac}</td><td></td></tr> <tr> <td>Portable rough service luminaires</td><td>60245 IEC 66 ^c</td><td>PVC insulated and sheathed heavy duty flexible cord</td><td></td></tr> <tr> <td>Class III or with SELV circuits luminaires (up to 25 V a.c./60 V d.c.)</td><td></td><td></td><td>Un-insulated conductor ^b</td></tr> <tr> <td>Class III or with SELV circuits luminaires (above 25 V a.c./60 V d.c.), including 50 V a.c./120 V d.c.</td><td>Unsheathed basic insulated conductor</td><td></td><td></td></tr> </tbody> </table> ^a For indoor use only. ^b AS/NZS 3000 may restrict the use of un-insulated conductors in certain special installations. ^c For supply voltages greater than 250 V, higher voltage grade cables and cords than those given in the above table may be necessary. Third paragraph replaced by: To provide adequate mechanical strength, the nominal cross-sectional area of the conductors shall be not less than: — 0,75 mm²; — 1,0 mm² for portable rough service luminaires.			Luminaire	Rubber	PVC	No insulation	Ordinary class I luminaires	60245 IEC 51S ^c	60227 IEC 52 ^c		Ordinary class II luminaires	60245 IEC 53 ^c	60227 IEC 52 ^c		Luminaires which are other than ordinary class I and II	60245 IEC 57 ^c	60227 IEC 53 ^{ac}		Portable rough service luminaires	60245 IEC 66 ^c	PVC insulated and sheathed heavy duty flexible cord		Class III or with SELV circuits luminaires (up to 25 V a.c./60 V d.c.)			Un-insulated conductor ^b	Class III or with SELV circuits luminaires (above 25 V a.c./60 V d.c.), including 50 V a.c./120 V d.c.
Luminaire	Rubber	PVC	No insulation																									
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Class III or with SELV circuits luminaires (above 25 V a.c./60 V d.c.), including 50 V a.c./120 V d.c.	Unsheathed basic insulated conductor																											
5.2.16	Add: Class II luminaires for fixed wiring incorporating an appliance coupler shall not have means to allow further luminaires to be connected, including looping in by cascading. Luminaire couplers incorporated with the luminaire shall comply with IEC 61995-1. Luminaires incorporating installation couplers may have means to allow further luminaires to be connected by cascading provided the through wiring is rated for the current rating of the installation coupler.		N																									

Australia deviation			
Clause	Requirement + Test	Result - Remark	Verdict
5.2.18	Replaced by: All portable luminaires with a flexible supply cord shall be fitted with a plug complying with AS/NZS 3112. Other luminaires with flexible cords shall be fitted with a plug complying with AS/NZS 3112, unless they have the warning allowed by Clause 3.2.12.		P
5.3.1	Third paragraph replaced with the following: Internal wires coloured green, yellow or green/yellow combination shall be used for making protective earth connections only. Functional earth connections shall not be made by wires coloured green, yellow or green/yellow combination.		P
	<i>NOTE 3 Internal wires of other colours are not precluded from making protective earthing connections</i>		—
5.3.1.3	Replaced by: In class II luminaires, where the internal wiring has a live conductor and the wiring insulation may touch accessible metal parts under normal operating conditions, the insulation, at least at the places of contact, shall comply with the requirements for double or reinforced insulation, e.g. by applying sheathed cables or sleeves.		N
7	PROVISION FOR EARTHING		P
7.2.11	Third paragraph replaced with the following: All conductors, whether internal or external, coloured green, yellow or green/yellow combination, shall only be connected to an earthing terminal.		P
8	PROTECTION AGAINST ELECTRIC SHOCK		P

Australia deviation			
Clause	Requirement + Test	Result - Remark	Verdict
8.2.1	First two paragraphs including Note 1 replace by following: Luminaires shall be so constructed that their live parts and basic insulation are not accessible when the luminaire has been installed and wired as in normal use. Live parts shall not be accessible when the luminaire is opened as necessary for user cleaning or maintenance, or for replacement of lamps, replaceable light sources or (replaceable) starters, even if the operation cannot be achieved by hand. Luminaires with non-replaceable light sources are subjected to the tests of Clause 4.29 prior to applying the tests and inspections of Section 8 of this Standard. This does not apply to the non-current-carrying parts of caps which comply with the relevant IEC safety standard.		P
	Delete "Covers in fixed luminaires that cannot be removed by a single action with one hand are not removed. However, covers which have to be removed for changing lamps or starters are removed for this test."		—
9	RESISTANCE TO DUST, SOLID OBJECTS AND MOISTURE		N
9.2	Add after NOTE 1: <i>NOTE 101 A designation of IPX7 or IPX8 is considered unsuitable for exposure to water jets (designated by IPX5 or IPX6) and may not comply with requirements for second numeral 5 or 6 unless it is dual coded.</i>		—
10	INSULATION RESISTANCE AND ELECTRIC STRENGTH, TOUCH CURRENT AND PROTECTIVE CONDUCTOR CURRENT		P
10.3	Delete the second row beginning with 'Class I luminaires rated up to and including 16 A...'. First column, third row, deletes the word 'Metal'.		—
12	ENDURANCE TEST AND THERMAL TEST		—
Table 12.1	First column, first row, the text replaced by: 'Case (of control gear, capacitor, starting device, electronic ballast or convertor, etc.)'		—

Australia deviation			
Clause	Requirement + Test	Result - Remark	Verdict
	Add: <i>NOTE 101 Luminaire manufacturers should consider the maximum ambient air temperature in the vicinity of components such as starting devices and electronic ballasts or converters. Component performance specifications advise manufacturers to mark or supply life data as maximum ambient air temperature based on 50,000 h. This t-life is often marked as t_a and is the temperature of the air in the vicinity of the component and is not related to the luminaire t_a. As such, luminaire manufacturers should measure air temperature in the vicinity of such components, within the luminaire, as even those complying with their t_c point measurements can still fail prematurely if t-life is exceeded.</i>		—

13	RESISTANCE TO HEAT, FIRE AND TRACKING				P
13.3	Parts of non-metallic material (other than ceramic) shall be resistant to flame and ignition. This Clause applies to all parts, including components, even if they have been tested to their own IEC or equivalent standard.				—
13.3.1	Parts of non-metallic material supporting connections that could become an ignition source, and parts of non-metallic material within a distance of 3 mm of such connections shall withstand the test glow-wire at 750 °C and applied to one test sample for 30 s:				P
	<i>Welded connections, soldered connections on printed circuit boards and other connections carrying less than 0.2 A during normal operation are not considered to be an ignition source.</i>				—
	Object/ Part No./ Material	Manufacturer/ trademark	Ignition of specified layer Yes/No	Duration of burning (tb) (s)	Verdict
	Switch	See annex 1	No	1.0	P
13.3.2	All other parts of non-metallic material which do not support connections that could become an ignition source, but provide protection against electric shock or maintain creepage and clearances shall withstand the glow-wire test at 650 °C and applied to one test sample for 30 s:				P
	Object/ Part No./ Material	Manufacturer/ trademark	Ignition of specified layer Yes/No	Duration of burning (tb) (s)	Verdict
	Dome of G9 lampholder	See annex 1	No	0	P
13.3.3	During the application of the glow-wire tests of sub clauses 13.3.1, if a flame is produced that persists for longer than 2 s, 'the non-metallic parts that encroach within the envelope of a vertical cylinder having a diameter of 20 mm and a height of 50 mm above the point of application of the glow wire' are further applied to needle-flame test of AS/NZS 60695.11.5.		No flame produced		N

Australia deviation						
Clause	Requirement + Test			Result - Remark		Verdict
	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
	--	--	--	--	--	--
	<i>NOTE This requires the needle flame to be applied to all parts likely to be impinged upon by the glow-wire flame within the hypothetical envelope of a vertical cylinder positioned above the point of application of the glow-wire. This applies to all parts unless there is a barrier that passes the needle-flame test and is within the cylinder and would protect the part from the glow-wire flame.</i>					—

Australia deviation			
Clause	Requirement + Test	Result - Remark	Verdict
ANNEX 6	Variations to AS/NZS 60598.2.1:1998 for application in Australia and/or New Zealand (AS/NZS 60598.2.1:2014+A1:2016)		P
1	SCOPE		P
	This Standard specifies requirements for fixed general purpose luminaires incorporating electric light sources for operation on supply voltages not exceeding 1000 V. It is to be read in conjunction with those sections of AS/NZS 60598.1 to which reference is made. This Standard also specifies requirements for double-capped LED lamps (Appendix A). Appendix A is to be read in conjunction with those sections of AS/NZS 60598.1 to which reference is made.	Fixed lamp	P
6	MARKING		N
	LED luminaires with G5 or G13 lampholders shall be marked with the following warning: WARNING: NOT FOR USE WITH ANY FLUORESCENT LAMP—FOR USE ONLY WITH TYPE X LED LAMPS		N
	The warning label shall be durable and the font size shall be a minimum of 5 mm for letters and numbers and 5 mm for symbols and shall be visible during lamp replacement		N
	NOTE: Manufacturers should specify minimum requirements for the operations of their lamps, including spacing, enclosure design and temperature limitations.		N
7	CONSTRUCTION		N
	LED luminaires with G5 and G13 lampholders shall include a fuse to protect a fluorescent lamp that is inadvertently installed:		N
	Each fuse shall—		N
	a) be of the 250 V HRC type		N
	b) have a 2 A max. quick-acting type rating; and		N
	c) be used to protect a maximum of two lamps.		N
13	ENDURANCE TESTS AND THERMAL TESTS		N
	Luminaires with an IP classification greater than IP20 shall be subjected to the relevant tests of Clauses 12.4, 12.5 and 12.6 of Section 12 of AS/NZS 60598.1 after the test(s) of Clause 9.2 but before the test(s) of Clause 9.3 of Section 9 of AS/NZS 60598.1 specified in Clause 14 of this Standard.		N
14	RESISTANCE TO DUST AND MOISTURE		N

Australia deviation			
Clause	Requirement + Test	Result - Remark	Verdict
	For luminaires with an IP classification greater than IP20 the order of the tests specified in Section 9 of AS/NZS 60598.1 shall be as specified in Clause 13 of this Standard.		N
APPENDIX A	SAFETY REQUIREMENTS FOR DOUBLE-CAPPED LED LAMPS		N
	The requirement is not applicable due to the nature of the product.		—
APPENDIX B	SAFETY REQUIREMENTS FOR T8 TO T5 LAMP CONVERTERS		N
	The requirement is not applicable due to the nature of the product.		—

===== End of Report =====

Photo Documentation

Model: DOT03SW



Photo 1



Photo 2

Photo Documentation



Photo 3



Photo 4

Photo Documentation

Model: DOT03HW



Photo 5

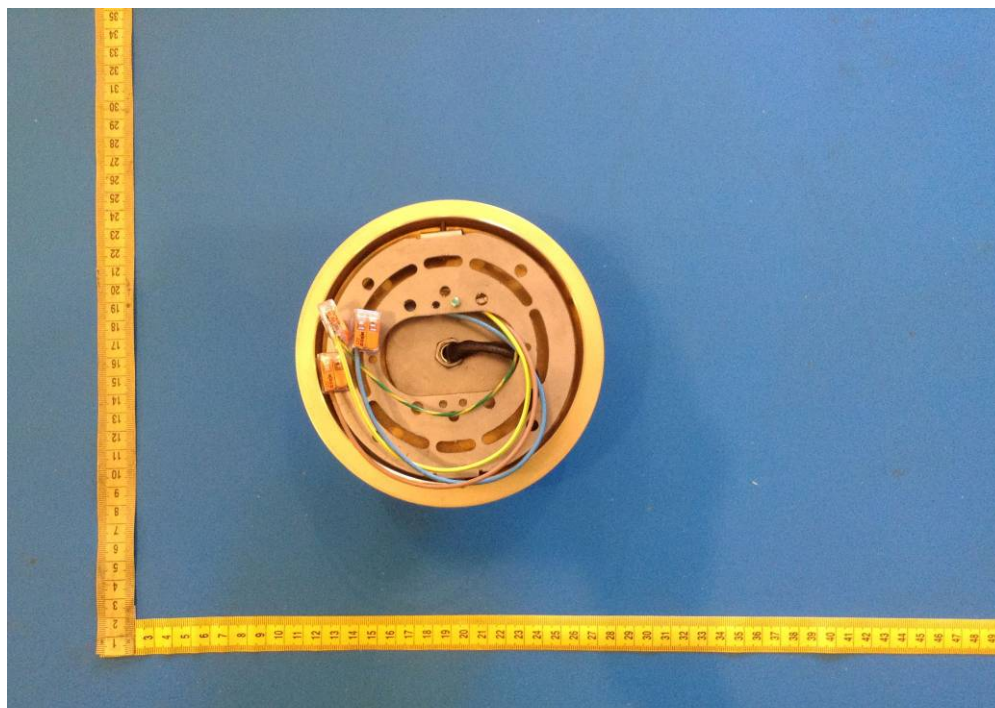


Photo 6

Photo Documentation

Model: DOT10SW

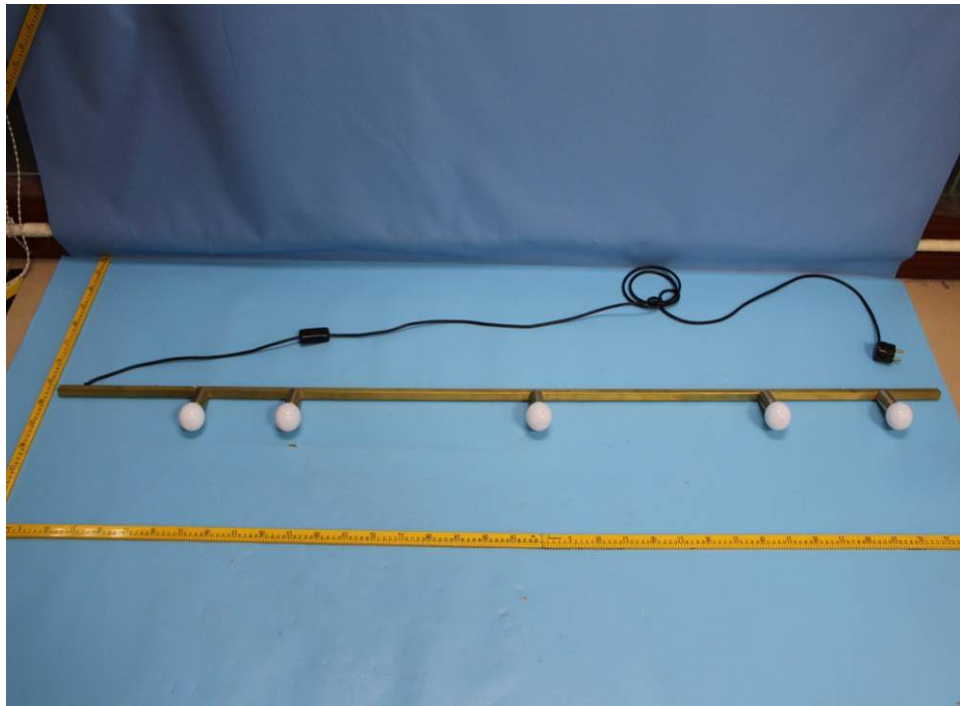


Photo 7



Photo 8

Photo Documentation

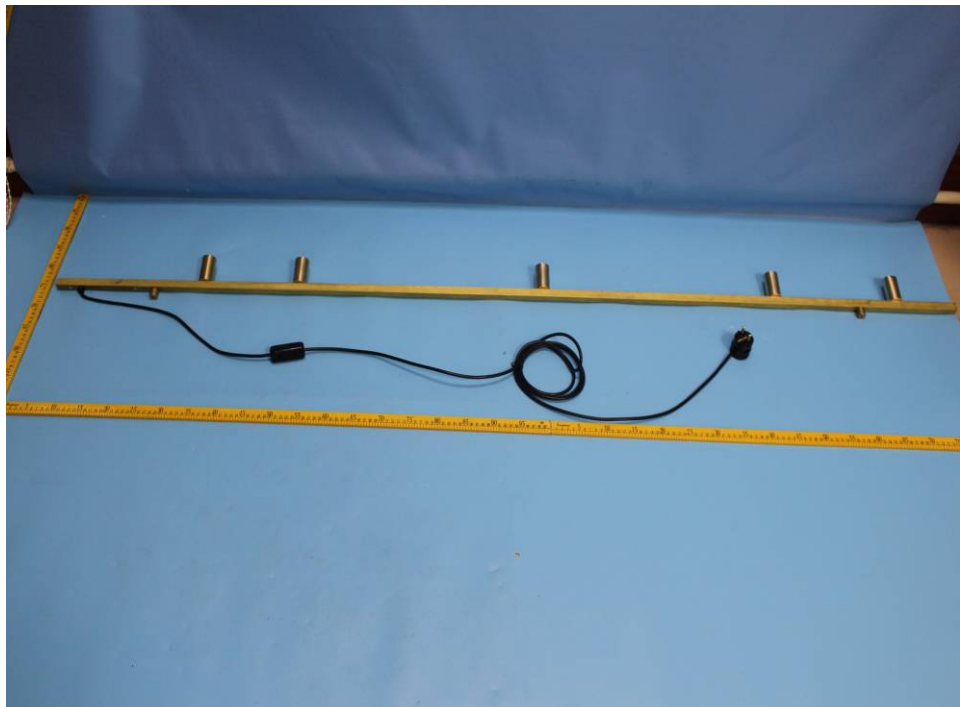


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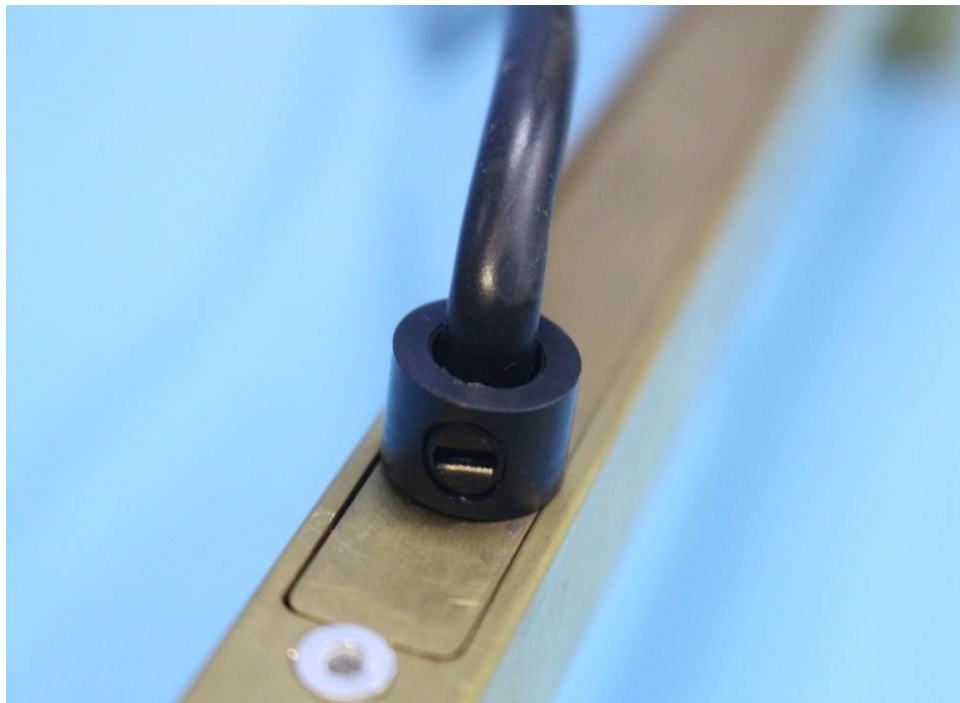


Photo 10

Photo Documentation

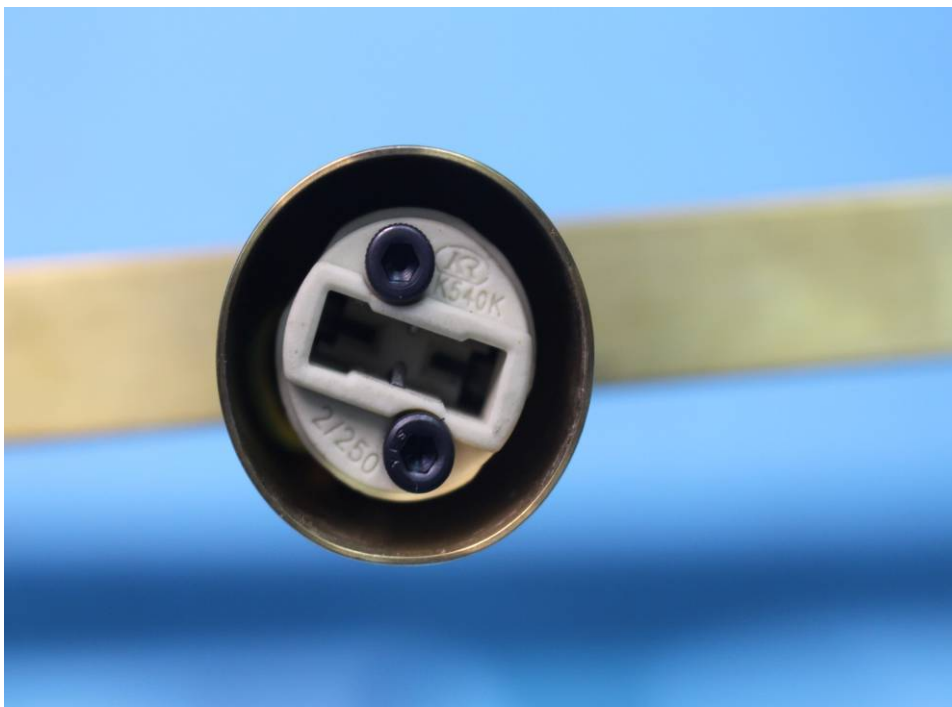


Photo 11



Photo 12

Photo Documentation



Photo 13 Plug for AU



Photo 14 Plug for EU

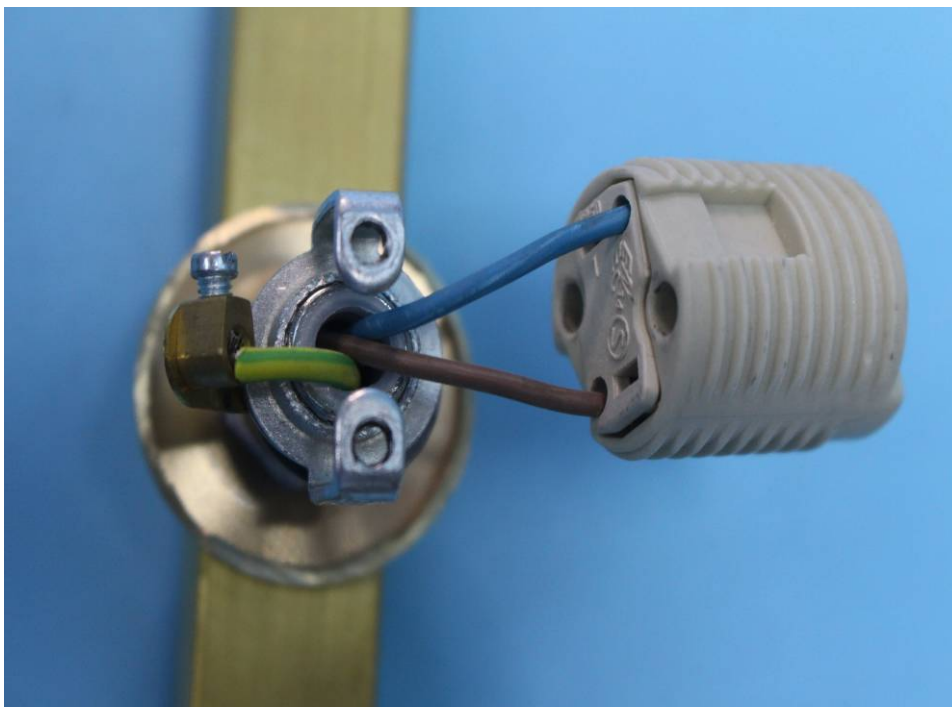
Photo Documentation

Photo 15 G9 lampholder construction of grounded sockets for DOT11, DOT10HW, dot10sw, DOT03 SW, DOT03 HW and DOT02

Model: DOT10HW

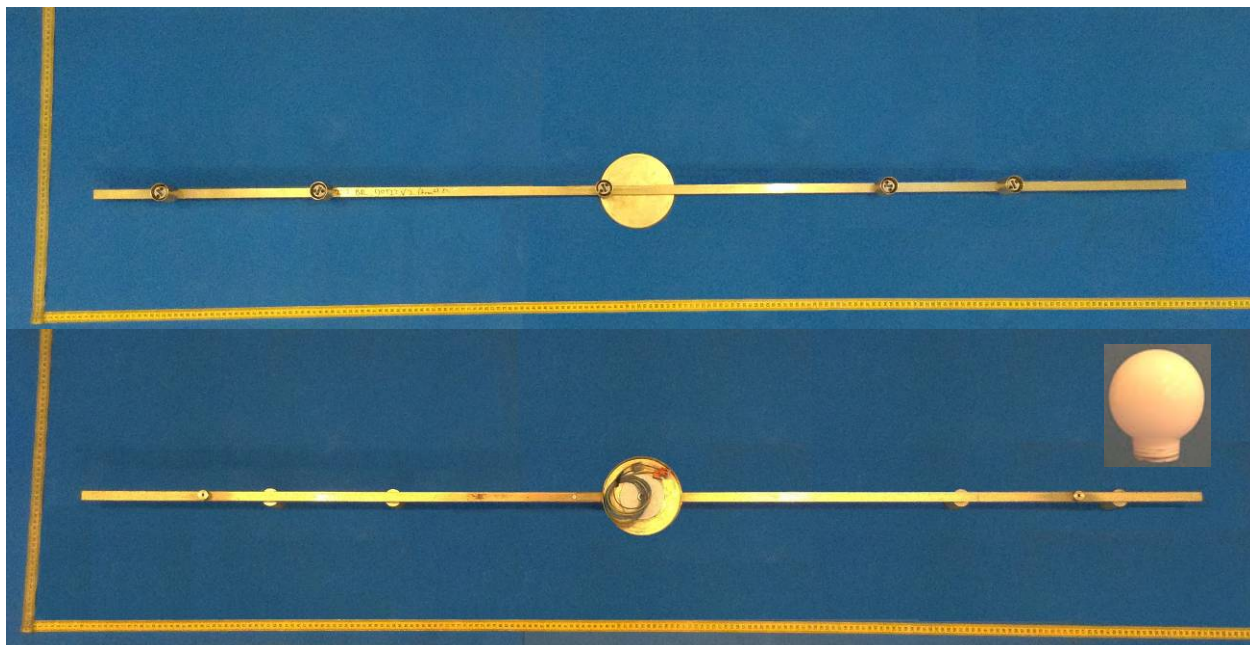


Photo 16

Photo Documentation

Model: DOT07



Photo 17

Model: DOT01

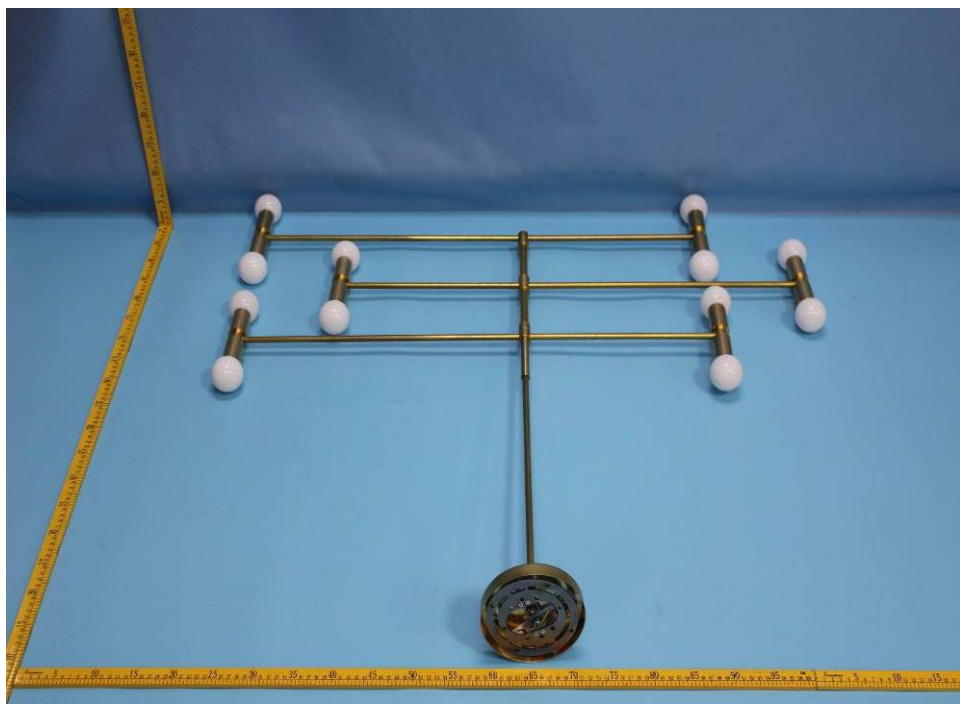


Photo 18

Photo Documentation

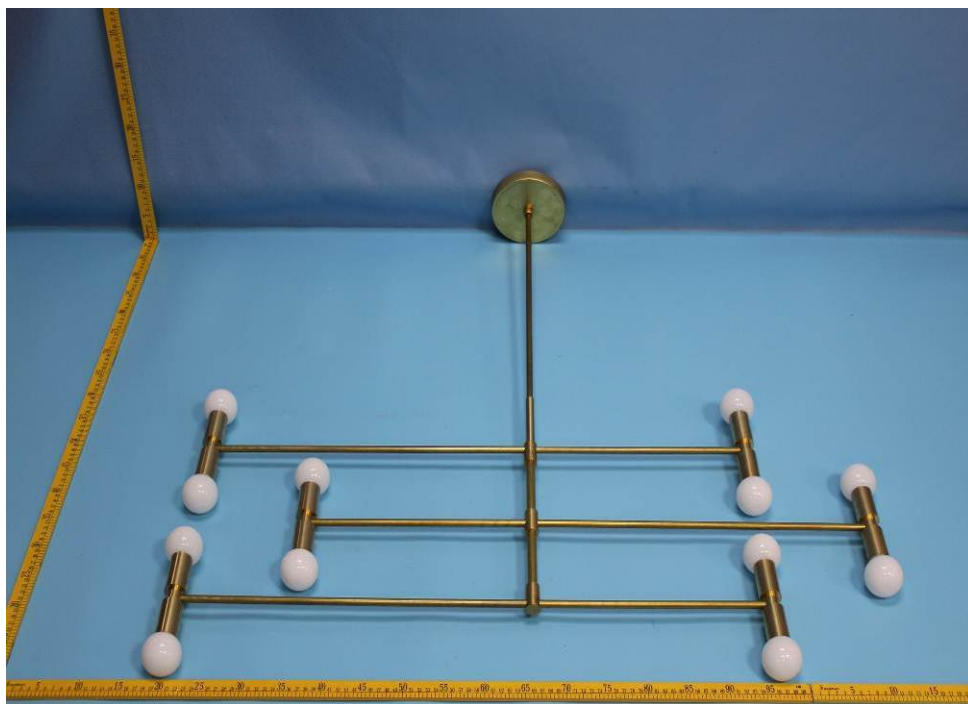


Photo 19



Photo 20

Photo Documentation

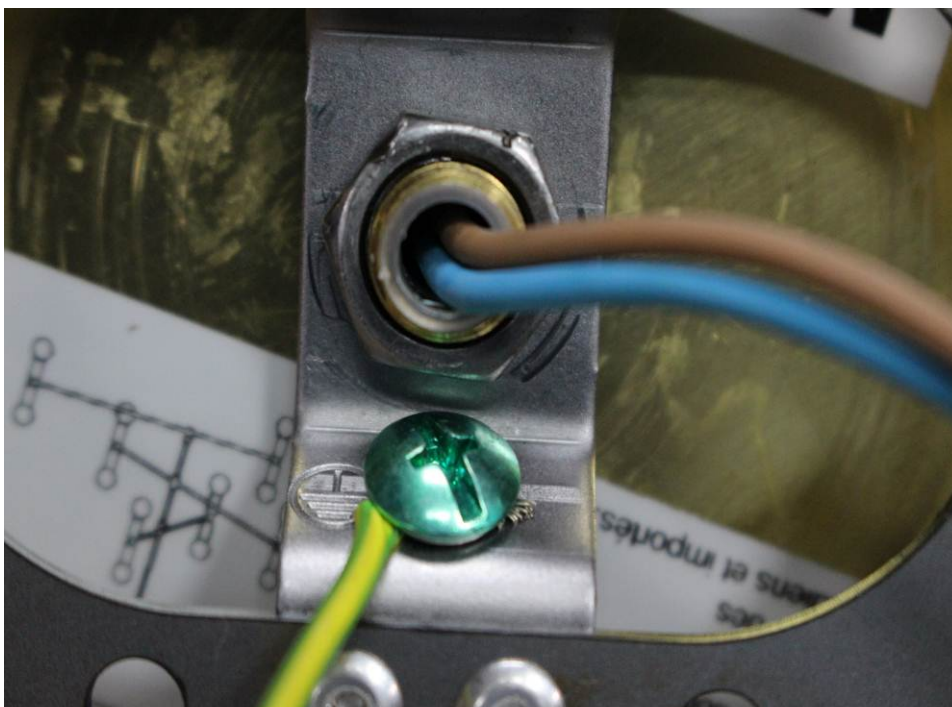


Photo 21



Photo 22

Photo Documentation

Photo 23 Alternative construction of G9 lampholder for all models

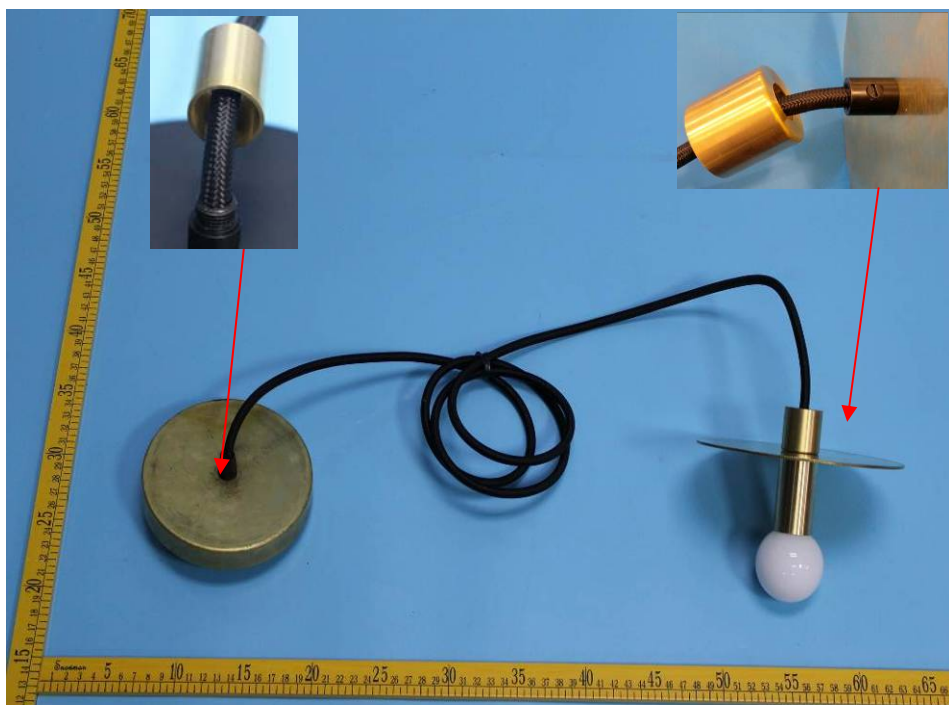
Model: DOT02

Photo 24

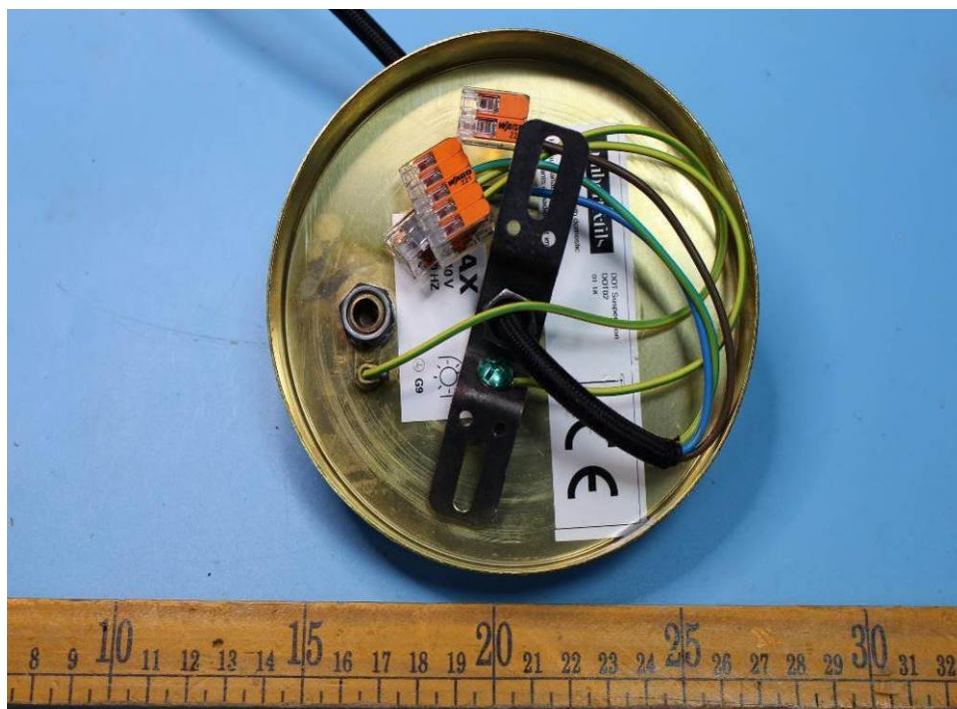
Photo Documentation

Photo 25



Photo 26 Same ground screws of model DOT02 and DOT11

Photo Documentation

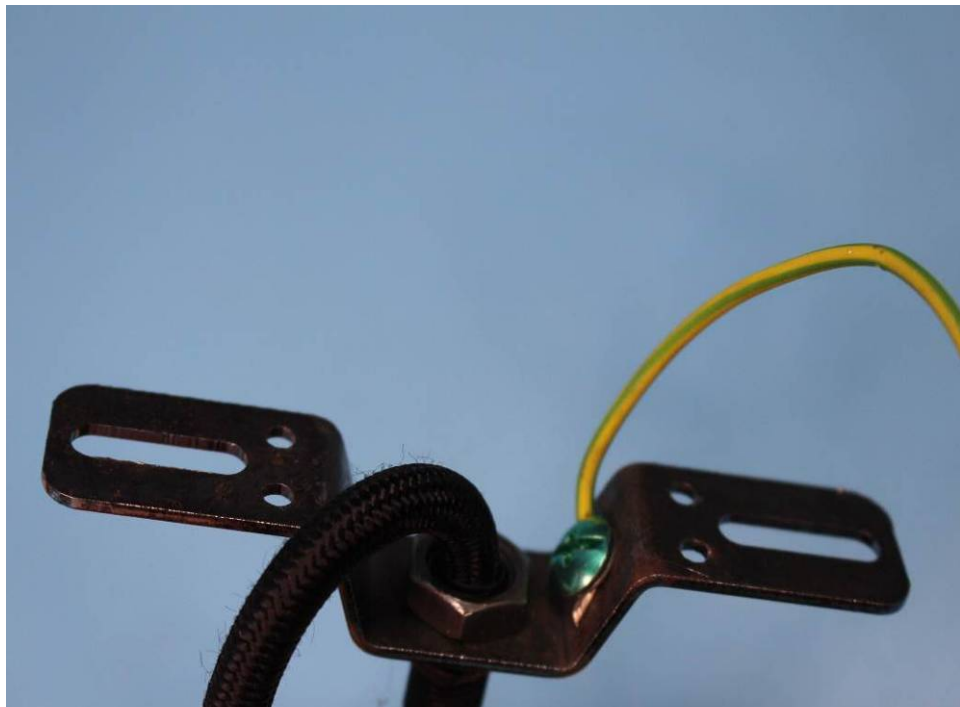


Photo 27 Same ground screws of model DOT02 and DOT11



Photo 28

Photo Documentation

Model: DOT11

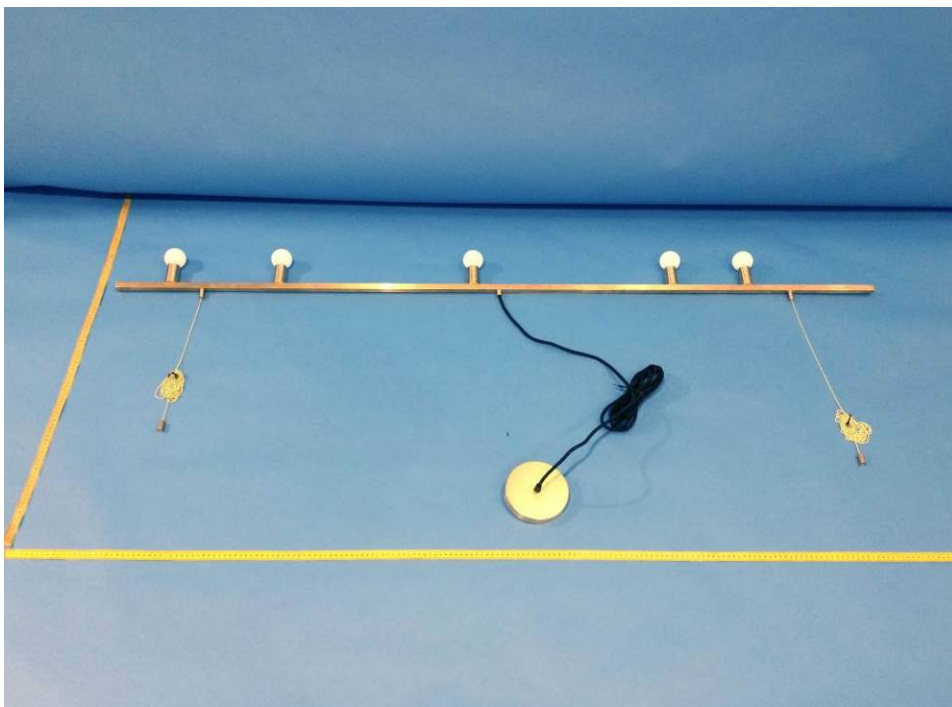


Photo 29

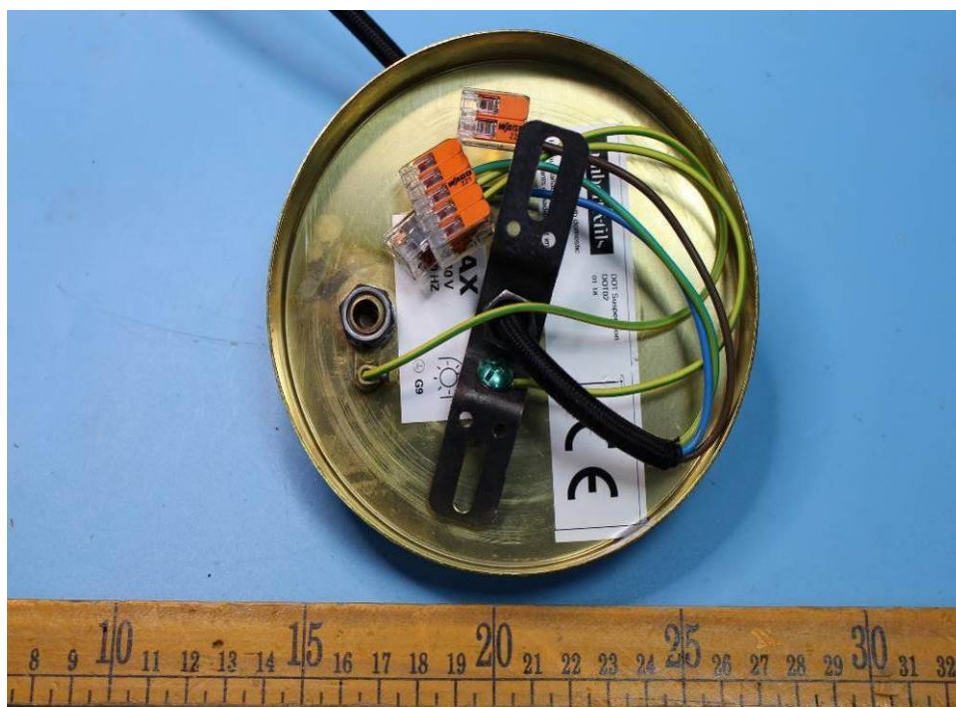


Photo 30

Photo Documentation

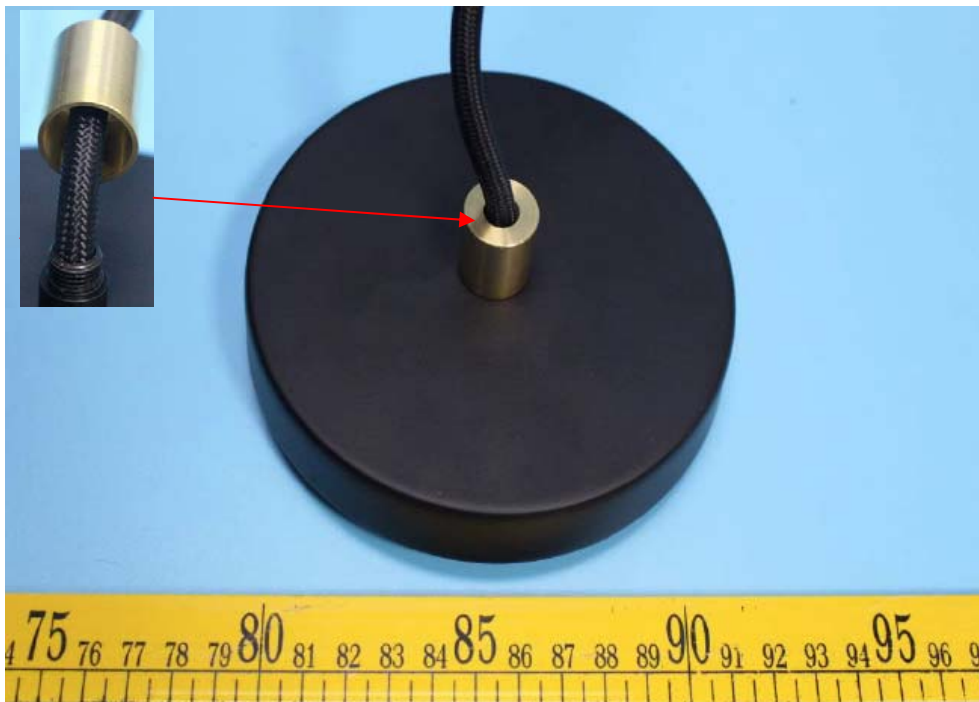


Photo 31



Photo 32

Photo Documentation

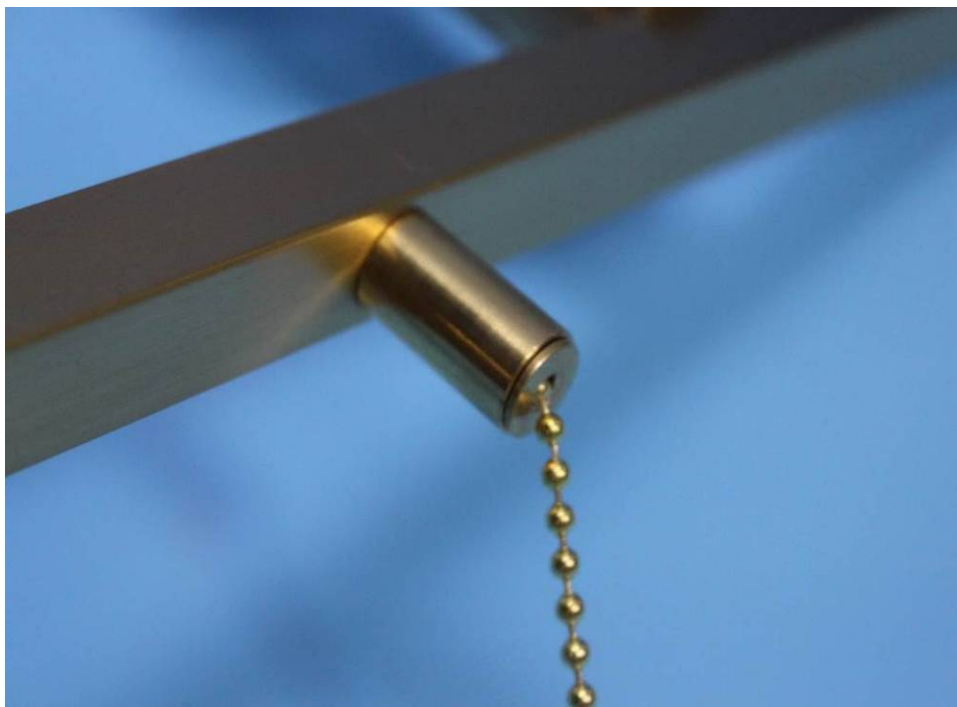


Photo 33

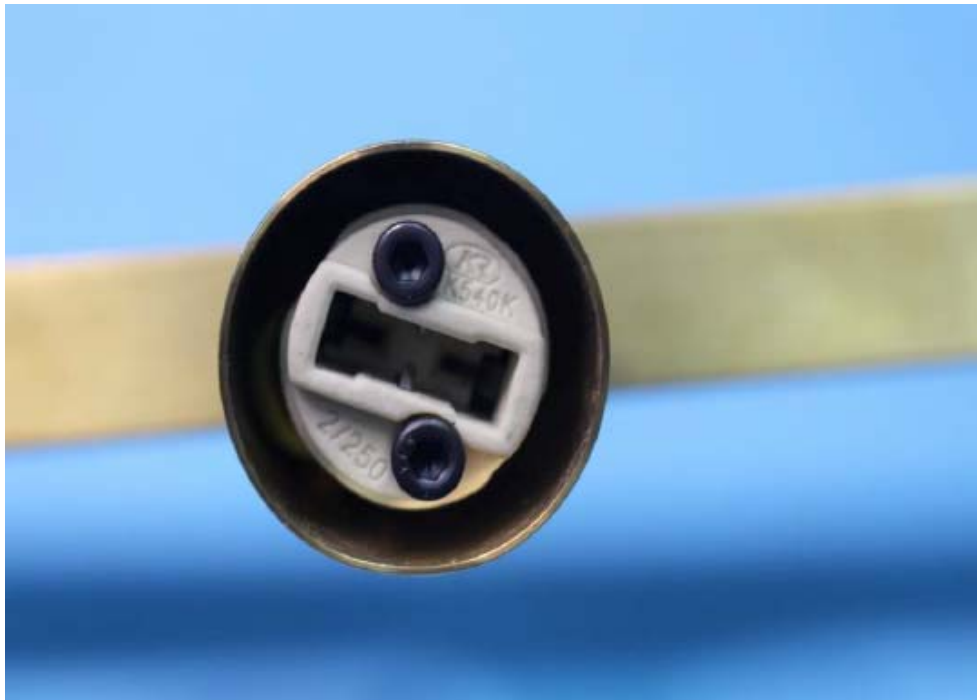


Photo 34 G9 Lampholder construction for standard sockets of DOT01, DOT07, DOT10 HW/SW and DOT11

Photo Documentation

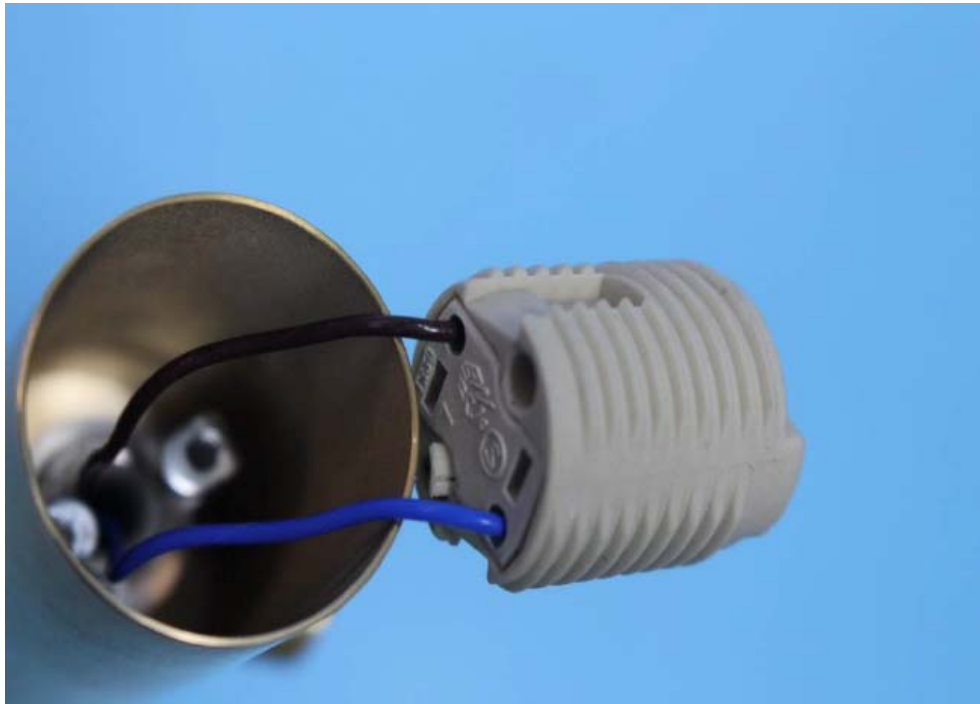


Photo 35 G9 lampholder construction for standard sockets of DOT01, DOT07, DOT10 HW/SW and DOT11

===== End of Photo =====