



TEST REPORT

Reference No. : WTF21F09103355L

Applicant..... : Mid Ocean Brands B.V.

Hong Kong

Product Name Wireless charging office lamp with speaker

Model No...... : MO9675

Standards : Luminaires

Part 2-4: Portable general purpose luminaires

IEC 60598-1:2020 IEC 60598-2-4:2017

Date of Receipt sample : 2021-11-01

Date of Test 2021-11-01 to 2021-11-15

Date of Issue...... 2021-11-26

Test Report Form No. : WSL-6059824A-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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Test item description.....: Wireless charging office lamp with speaker MOB

Model/Type reference: MO9675

Trade Mark.....::

Ratings......: SELV 5Vdc, LED 1.4W, Class III, IP20, wireless charger: Max. 5W

Copy of marking plate:





On the luminaires surface

Remark:

- 1. 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.
- 2. 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.

Summary of testing:

- All tests were carried out on the representative model MO9675, and found to comply with the requirements of the standards mentioned in page one.
- EN deviation for IEC 60598-2-4:2017 and IEC 60598-1:2020 was considered and found to comply with the requirement.
- 3. The touch switch were assessed acc. to EN 61347-2-11:2001+A1:2019, EN 61347-1:2015+A1:2021 and Australia deviation of AS/NZS 61347.1:2016+A1:2018, and the test result was found to comply with the requirement. And switch was tested with appliance for 10000 cycles operating test according to IEC 61058-1-1:2016 and found to comply with the requirement.
- Integral LED module was assessed according to IEC 62031:2018 and found to comply with the requirement.
- Retinal blue light hazard was assessed according to IEC/TR 62778:2014, lamp classification group: RG0 unlimited.
- Photobiological safety was assessed according to EN 62471:2008, classification group: exempt

 risk 1 risk 2 risk 3.
- 7. Wireless speaker was assessed according to EN IEC 62368-1:2020, see Waltek report WTF21D09103358Y.
- 3. Assessment of lighting equipment related to human exposure to electromagnetic fields was evaluated and fulfilled the requirements of EN 62493:2015 and found to comply with the requirement.
- Only the most unfavorable results are recorded in this report.



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Test	items	particul	lare.
1631	1161113	particu	ıaı ə.

Possible test case verdicts:

- test case does not apply to the test object: N (Not applicable)

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.

General product information:

Portable general purpose luminaires. For indoor use only and suitable for mounting on the normally

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	IEC 60598-2-4	71. 75.	
Clause	Requirement + Test	Result - Remark	Verdict
4.4 (0)	GENERAL TEST REQUIREMENTS		P
4.4 (0.3)	More sections applicable:	Yes No Section/s:	
4.4 (0.5)	Components	(see Annex 1)	3,1
4.4 (0.7)	Information for luminaire design in light sources s	standards	t _50
4.4 (0.7.2)	Light source safety standard:	IEC 62031	
200	Luminaire design in the light source safety standard	WILL SAULT AUT AUT	Р
A STATE OF	THE NATE WHEEL WHEEL WAS AND THE WAY	a de de de	der s
4.5 (2)	CLASSIFICATION OF LUMINAIRES	With the August August	Р
4.5 (2.2)	Type of protection:	Class III	P
4.5 (2.3)	Degree of protection:	IP20	
4.5 (2.4)	Luminaire suitable for direct mounting on normally flammable surfaces:	Yes ⊠ No □	WALLE
4.5 (2.5)	Luminaire for normal use:	Yes ⊠ No □	- C
411.	Luminaire for rough service:	Yes No 🖂	- a
4.5.1 (-)	Ordinary luminaire classified "for indoor use only":	Yes ⊠ No □	16 - 15 i
et st	Luminaires other than ordinary classified "for indoor use only":	Yes □ No ⊠	5 - TB
4 764 211	Luminaires other than ordinary classified for "outdoor use" and "for indoor use":	Yes □ No ⊠	- Tet
4.5.2 (-)	Portable luminaire for outdoor use classified IPX4 or higher	MILITE MALL MALL MALL	N
4.5.3 (-)	Luminaires designed for standing on a floor or table classified as suitable for direct mounting on normally flammable surfaces	onlines whites white white	Р
in the	and the state of the state of	The Write Aver Aver Aver Aver	· 2n.
4.6 (3)	MARKING	a state of the	Р
4.6 (3.2)	Mandatory markings	with the the shi	Р
· Star	Position of the marking	at the set of	Р
	Format of symbols/text	The are the top	Р
4.6 (3.3)	Additional information	The tip state state	Р
	Language of instructions	English	Р
4.6 (3.3.1)	Combination luminaires	EX MILITER WHITER WHITER WAY	N
4.6 (3.3.2)	Nominal frequency in Hz	- Jet Jet stret stret	N



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IEC 60598-2-4				
Clause	Requirement + Test	Result - Remark	Verdict	
4.6 (3.3.3)	Operating temperature	The state willing	N	
4.6 (3.3.5)	Wiring diagram	at the state of	Et Jet N	
4.6 (3.3.6)	Special conditions	t st st st	N	
4.6 (3.3.7)	Metal halide lamp luminaire – warning	Mar Aller Aller	N	
4.6 (3.3.8)	Limitation for semi-luminaires	MULTE WALL MEET	N	
4.6 (3.3.9)	Power factor and supply current	REFER WITTER WHITE AN	N	
4.6 (3.3.10)	Suitability for use indoors	fet white white whit	N	
4.6 (3.3.11)	Luminaires with remote control	- Will antiet while	White W.	
4.6 (3.3.12)	Clip-mounted luminaire – warning	THE STATE STATE	N N	
4.6 (3.3.13)	Specifications of protective shields		N	
4.6 (3.3.14)	Symbol for nature of supply		N	
4.6 (3.3.15)	Rated current of socket outlet	with the the	N	
4.6 (3.3.16)	Rough service luminaire	White Maile Mail.	N	
4.6 (3.3.17)	Mounting instruction for type Y, type Z and some type X attachments	ALTER MILITER MALTER AN	N	
4.6 (3.3.18)	Non-ordinary luminaires with PVC cable	TER MUTER MUTER MUT	N	
4.6 (3.3.19)	Protective conductor current in instruction if applicable	to restrict constitution of the	THE WE	
4.6 (3.3.20)	Provided with information if not intended to be mounted within arm's reach	Tet ITH SIET	mittel min	
4.6 (3.3.21)	Non replaceable and non-user replaceable light sources information provided	of the	P	
4.6 (3.3.22)	Controllable luminaires, classification of insulation provided	in the same and	N	
4.6 (3.3.23)	Luminaires without controlgear provided with necessary information for selection of appropriate component	the tell the	W N	



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Maximum power rating marked

Position of the marking

	IEC 60598-2-4				
Clause	ئىرى.	Requirement + Test	Result - Remark	Verdict	
4.6 (3.3.24)		ot supplied with terminal block, information on the kaging	are say an	N N	
4.6 (3.3.25)		ninaires employing light sources emitting UV on ns wiring, information provided	the the state of	N	
4.6 (3.3.26)		I mounted luminaire using external flexible cable ord longer than 0.3 m, information provided	+ 12 14 50	- N	
4.6 (3.4)	Tes	t with water	15s	Р	
· Carley	Tes	t with hexane	15s	, TP	
7.5	Leg	ible after test	au au au	Р	
(C) (S)	Lab	el attached	the the state of	Р	
4.6.1 (-)	Lum	ninaire not suitable for outdoor application	to the think	Р	
ite Whi	Rec	uired symbol	of the state and	Р	
	Info	rmation in the instructions	211. 211. 4	Р	
4.6.2 (-)		door use, socket outlet incorporated in the inaire	MULTER MALIE MALLE	N	

4.7 (4)	CONSTRUCTION		Р
4.7 (4.2)	Components replaceable without difficulty	E THE WIND WITH WHILE	Р
4.7 (4.3)	Wireways smooth and free from sharp edges	30 30 35	Р
4.7 (4.4)	Lampholders	Life oute south south a	N
4.7 (4.4.1)	Integral lampholder	THE THE STEE STEEL STEEL	N
4.7 (4.4.2)	Wiring connection	of the test test and	N
4.7 (4.4.3)	Lampholder for end-to-end mounting	and the second	N
4.7 (4.4.4)	Positioning	WHELL MALL MALL WALL	N
The !	- pressure test (N)	TITES INTE WALTE WILL A	-
nitely.	After test the lampholder comply with relevant standard sheets and show no damage	THE LIFE ALIES OLIES AND	N
TER MUZ	After test on single-capped lampholder the lampholder have not moved from its position and show no permanent deformation	ex writes writer arrites white	N
+ 10	- bending test (N):	2 2 2 2 2	36
an.	After test the lampholder has not moved from its position and show no permanent deformation	antite unit when when	N

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Clause	Requirement + Test	Result - Remark	Verdict
Clause	Requirement + rest	Result - Remark	Verdici
4.7 (4.4.5)	Peak pulse voltage	atter mitter mitter as	ALTER NOT N
4.7 (4.4.6)	Centre contact	Set Set Set si	EL N
4.7 (4.4.7)	Parts in rough service luminaires resistant to tracking	t let let let	L N
4.7 (4.4.8)	Lamp connectors	mer mer me	N
4.7 (4.4.9)	Caps and bases correctly used	MILLE MALLE MALE	N N
4.7 (4.4.10)	Light source for lampholder or connection according IEC 60061 not connected another way	RELEASE MULTER MULTER AN	N
4.7 (4.5)	Starter holders	NET CHE LITER SOLD	N
. N	Starter holder in luminaires other than class II	211 211 2	N
NI COL	Starter holder class II construction	- Little Miller Miller	N S
4.7 (4.6)	Terminal blocks	in in	N-
an a	Tails	THE OLIVE MILE OF	N N
	Unsecured blocks		, N
4.7 (4.7)	Terminals and supply connections	White whi	P
4.7 (4.7.1)	Contact to metal parts	- III NOVE MATE	* MIT PLI
4.7 (4.7.2)	Test 8 mm live conductor	at all st	N.A
	Test 8 mm earth conductor	me me me	N
4.7 (4.7.3)	Terminals for supply conductors	NITER WALTER WITTER W	N S
4.7 (4.7.3.1)	Welded method and material	STEP INSTEAD WASTER SHIP	THE WAY
et e	- stranded or solid conductor		- N
2hr.	- spot welding	MALLE WALL WALL	N
- Set	- welding between wires	at the set	N N
The .	- Type Z attachment	white and me	N
504.	- mechanical test according to 15.6.2	A A A	N N
n2n	- electrical test according to 15.6.3	The State of the State	N
State and	- heat test according to 15.6.3.2.3 and 15.6.3.2.4	of the text of	N.
4.7 (4.7.4)	Terminals other than supply connection	The the th	N
4.7 (4.7.5)	Heat-resistant wiring/sleeves	MUTTER MUTE MUTE	N

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IEC 60598-2-4			
Clause	Requirement + Test	Result - Remark	Verdict
4.7 (4.7.6)	Multi-pole plug	TEX STEX STEX SUITER AND	N CON
<i>*</i>	- test at 30 N		, N
4.7 (4.8)	Switches	A CITE WILL SHIP WAY	≥ _{th} B _{th}
et de	- adequate rating		P
-21/2	- adequate fixing	mil's since which winds	₹ _N Sb
Set.	- polarized supply		N N
alle.	- compliance with IEC 61058-1 for electronic switches	net whit was a	P
4.7 (4.9)	Insulating lining and sleeves	ich utile iviter ivite m	N
4.7 (4.9.1)	Retainment	t et like lifet mil	et N
الم ا	Method of fixing		N
4.7 (4.9.2)	Insulated linings and sleeves:	united whites white white	Must N
White.	Resistant to a temperature > 20 °C to the wire temperature or	liter writer writer writer w	N
State S	a) & c) Insulation resistance and electric strength	A STATE OF STATE OF	N
	b) Ageing test. Temperature (°C)		N
4.7 (4.10)	Double or reinforced insulation		WE WE
4.7 (4.10.1)	No contact, mounting surface – accessible metal parts – wiring of basic insulation	LITER SLITER SOLITERS	N N
Let.	Safe installation fixed luminaires		N N
71/2	Capacitors and switches	iter arith and and	N
4.7 (4.10.2)	Assembly gaps:	the state with the	N.
	- not coincidental	All An An Andrew	N
Chr.	- no straight access with test probe	The street with something	N
4.7 (4.10.3)	Retainment of insulation:	all the state state.	N ^t
4.	- fixed	in all all	N
الل محكوم	- unable to be replaced; luminaire inoperative	et tet litet mite and	N
, H.	- sleeves retained in position	the file of	L N
in the	- lining in lampholder	· John Life Mile Mile	N N
4.7 (4.10.4)	Protective impedance device	at at 1st 1st	N°

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Clause	IEC 60598-2-4	Popult Damark	Verdic
Clause	Requirement + Test	Result - Remark	verdic
WINTER	Basic and supplementary insulation bridged by resistor(s) or appropriate capacitor	LIET WITH WHITE	N
LITER AND	Double or reinforced insulation bridged by at least two separate resistors in series or appropriate capacitor(s)	DIET WILLEY WILLEY WILLEY BU	N
of Lot	Capacitors comply with IEC 60384-14	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N
TEN.	Resistors comply with test (a) in 14.2 of IEC 60065	MAN MAN ON ON	N
4.7 (4.11)	Electrical connections and current-carrying parts	MULT MULT MULT MILE	Р
4.7 (4.11.1)	Contact pressure	BUTTE BUTTE WHIT WHEN Y	Р
4.7 (4.11.2)	Screws:	LITER WHITE WALTER WHITE WAS	N
A LIVE	- self-tapping screws	E THE OUT WITH WITH	N
	- thread-cutting screws	Mr. M. 12.	N
4.7 (4.11.3)	Screw locking:	MILIER WALTER WALTER WALTER	N
Stell So	- spring washer	the state of the state of	N
	- rivets		N
4.7 (4.11.4)	Material of current-carrying parts	S MILLE WILLIAM MALIE WAL	Р
4.7 (4.14.7)	No contact to wood or mounting surface	A STATE WATER WATER	P
4.7 (4.14.7)	Electro-mechanical contact systems	Tet STET STEE STEEL	P
4.7 (4.12)	Screws and connections (mechanical) and glands	all the set of the se	P
4.7 (4.12.1)	Screws not made of soft metal	is such the the the	N
240.	Screws of insulating material	the state of the s	Р
Set	Torque test: torque (Nm); part:	Screw fixed enclosure: 0.5Nm	Р
	Torque test: torque (Nm); part:	aver, any over one	N
J. J. J.	Torque test: torque (Nm); part:	At the title title	N
4.7 (4.12.2)	Screws with diameter < 3 mm screwed into metal	a survey of the same	N
4.7 (4.12.4)	Locked connections:	THE WHITE WHITE WHITE WAS	N
Taller	- fixed arms; torque (Nm):	in the with with	N
	- lampholder; torque (Nm):	- A	N

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الم الم	IEC 60598-2-4		A
Clause	Requirement + Test	Result - Remark	Verdict
	- push-button switches; torque 0,8 Nm:		N N
4.7	Screwed glands; force (Nm)	THE RESERVE OF	N
(4.12.5)	Solowed glarids, folioe (1411)	11. 25. 2	st St
4.7 (4.13)	Mechanical strength	ALTER WALTER WALTER WAL	N
4.7 (4.13.1)	Impact tests:	let writer antier write	W. N
No. of Contract of	- fragile parts; energy (Nm):	- et set stet	N
	- other parts; energy (Nm):	Care the minimum.	N
(1.17 E)	1) live parts	THE STEEL ASSESSED.	N
	2) linings	the the thirty	N
the state	3) protection	of the state and	N
رد ا	4) covers	11 11 1	N
4.7 (4.13.2)	Metal parts have adequate mechanical strength	White Miles Miles	N N
4.7 (4.13.3)	Straight test finger	MALTER MALTER MALTER W	net N
4.7 (4.13.4)	Rough service luminaires	of Militer with	TEK NA
d d	- IP54 or higher		N
3/1/2	a) fixed	The Marie Marie Marie	N
- Cart	b) hand-held	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N
3/10	c) delivered with a stand	white white white	N
NUTER OF	d) for temporary installations and suitable for mounting on a stand	ALTER ANTER ANTER AN	STON STON
4.7 (4.13.6)	Tumbling barrel	The tip state with	et n
4.7 (4.14)	Suspensions, fixings and means of adjusting	at the set set	P.
4.7 (4.14.1)	Mechanical load:	and any an	N
Apr.	A) four times the weight	White all the Aller of	N
50th	B) torque 2,5 Nm	A & &	√N N
L 24	C) bracket arm; bending moment (Nm):	Arres Over Over My	N
ser se	D) load track-mounted luminaires	at at all of	N
\$ \d	E) clip-mounted luminaires, glass-shelve. Thickness (mm):	Aug Me in	N
To the	Metal rod. diameter (mm):	CLIP WILL WILL	N N

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

	No lamp control gear:	(compliance with Section 12)	Р
4.7 (4.16)	Luminaires for mounting on normally flammable s	urfaces	P
1. "A	c) surface temperature	THE WHILE MALL WHILE A	N
A.S.	b) temperature sensing control	a a a at	√ N
Alex.	a) construction	NUTE WILL WILL AND	N
1.7 (4.15.2)	Luminaires made of thermoplastic material with lamp of	control gear	N
* 5°	- electronic circuits exempted	was the state of	N
, 9n	- thermal protection	ter authorized and an	N
et .	- no fiercely burning material	and the state of	P
1000 1	- screen dimensions	NETER WITE SHIP WALL A	N
,et	- screen withstanding test of 13.3.1	4 4 4	N
They	- spacing ≥30 mm	ALTER OUTER STATE MALE	N
	- glow-wire test 650°C	See Test Table 1.15 (13.3.2)	Р
4.7 (4.15)	Flammable materials		
4.7 (4.14.6)	Strain on socket-outlets	anitet whitet w	N
4.7 (4.14.5)	Guide pulleys	MALTER MALTER WALTER MALTE	N
1.7 4.14.4)	Telescopic tubes: cords not fixed to tube; no strain on conductors	White white white white	N
راي ا	- electric strength test afterwards		Р
نامان	- strands broken:	0	Р
	- flexing test; number of cycles:	1500	Р
4.7 (4.14.3)	Adjusting devices:	the tell little stille	STEP.
"ing"	Bending moment (Nm) of semi-luminaire:	STEE WITE WITE SHITE	N
	Mass (kg) of semi-luminaire:	Mr. Mr. Mr.	N
	Stress in conductors (N/mm²):	t det det sitet mil	N
4.14.2)	Mass (kg):	THE THE WITE WITE A	
1.7	fixing devices Load to flexible cables	ALTER HALLE MALL MALL	N
	Fixed luminaire or independent control gear without	a a at at	N



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Claves	Doguiroment : Test	Dogult Domesti	// V-10
Clause	Requirement + Test	Result - Remark	Verdic
on the s	Provided with adaptor for a track meet the requirements for direct mounting on normally flammable surfaces	Et Milet Milet Milet M	N CON
4.7 (4.16.1)	Lamp control gear spacing:	MUTER MUTER MALTER MILE	N
J J	- spacing 35 mm	+ 2 2 20	N
-7/	- spacing 10 mm	un me me m	N
4.7 (4.16.2)	Thermal protection:	Tet united united whiteh	N
Set .	- in lamp control gear	e state of the	A JON
$n_c = \sigma_c$	- external	arity only who was	N
نی کلی	- fixed position	at the set of	N
	- temperature marked lamp control gear	they have the fair	N
4.7 (4.16.3)	Design to satisfy the test of 12.6	(see clause 12.6)	N N
4.7 (4.17)	Drain holes	et the atternation	NITE NOT
d	Clearance at least 5 mm		N
4.7 (4.18)	Resistance to corrosion	The Shrift And	N
4.7 (4.18.1)	- rust-resistance	THE WALLE MALLY WALLE	, N
4.7 (4.18.2)	- season cracking in copper	TEN MATER MATER MATER	John N
4.7 (4.18.3)	- corrosion of aluminium	the state with the	N N
4.7 (4.19)	Ignitors compatible with ballast	at the set with	of N
4.7 (4.20)	Rough service vibration	ent in in in	N
4.7 (4.21)	Protective shield	activity with which	N.
4.7 (4.21.1)	Shield fitted if tungsten halogen lamps or metal halide lamps	ite muit autic music a	N
La a	Shield of glass if tungsten halogen lamps	TER MITE WITE WA	N
4.7 (4.21.2)	Particles from a shattering lamp not impair safety	at not not need	⊢ N
4.7 (4.21.3)	No direct path		N
4.7 (4.21.4)	Impact test on shield	The rule was the	N

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

Clause	Requirement + rest	Result - Remark	verdict
27	A A A A A A	The The Ship of	
5°	Glow-wire test on lamp compartment:	See Test Table 1.15 (13.3.2)	N
4.7 (4.22)	Attachments to lamps not cause overheating or damage	mere when when when i	N
4.7 (4.23)	Semi-luminaires comply Class II	TE MILE MILE ME M	N
4.7 (4.24)	Photobiological hazards		Р
4.7 (4.24.1)	No excessive UV radiation if tungsten halogen lamps and metal halide lamps (Annex P)	Whitek whitek whitek white	N
4.7 (4.24.2)	Retinal blue light hazard	atter miter writer writer	Р
SEK SINI	Class of risk group assessed according to IEC/TR 62778	RG0 unlimited	ich -
<i>(</i>)	Luminaires with E _{thr} :	74 74 2 T	N
ALC:	a) Fixed luminaires	t till still still still still	N
	- distance x m, borderline between RG1 and RG2:	Mr. Mr. A.	N
are .	- marking and instruction according 3.2.23	LIEB RITER WITE WILL	N
,÷	b) Portable and handheld luminaires		N
vez "n	- marking according 3.2.23 if RG1 exceeded at 200 mm according to IEC/TR 62778	The state of	N.V
L ALL	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	White white white whi	N
4.7 (4.25)	Mechanical hazard	MULTIN MALL MALL MAN	Р
ares a	No sharp point or edges	THE RUTE MITE WHITE	Р
4.7 (4.26)	Short-circuit protection		N.
4.7 (4.26.1)	Adequate means of uninsulated accessible SELV or PELV parts	+ 1+ 14 54 5	N
4.7 (4.26.2)	Short-circuit test with test chain according 4.26.3	and any any and	N
The .	Supply source ES1 PSE	WILL MILL MILL AND	N
100	Test chain not melt through	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N
ist of	Test sample not exceed values of Table 12.1 and 12.2	The same and and a	N
4.7 (4.27)	Terminal blocks with integrated screwless protect	ive earthing contacts	N
. Wille	Test according Annex V	· Life wife mile mile	N
	Pull test of terminal fixing (20 N)	24, 24, 24,	N



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ار ب	IEC 60598-2-4	1 3 1	- 3
Clause	Requirement + Test	Result - Remark	Verdic
- 4	After test, resistance < 0,05 Ω	1 1 1 1 1	N
11, 1	Pull test of mechanical connection (50 N)	WELL MELL MULL AND COMPANY	N
de s	After test, resistance $< 0.05 \Omega$	* * * * * * * * * * * * * * * * * * * *	N
	Voltage drop test, resistance $< 0.05 \Omega$	the fact that the same	N
4.7 (4.28)	Fixing of thermal sensing control		N
	Not plug-in or easily replaceable type	the left that the	N
200	Reliably kept in position	mer aug me an	N
gritter ist	No adhesive fixing if UV radiations from a lamp can degrade the fixing	STIFF SHIELD SHIELD SHIELDS	N
d 3	Not outside the luminaire enclosure	and the state of	N
20	Test of adhesive fixing:	the miles mer shirt shirt shi	N
9 JE	Max. temperature on adhesive material (°C):	a ser set set set	
-2/	100 cycles between t _{min} and t _{max}	and any an	N
N. Carlot	Temperature sensing control still in position	10 10 10 10 10 10 10 10 10 10 10 10 10 1	N
4.7 (4.29)	Luminaires with non-replaceable light source		N
y 41	Not possible to replace light source	The Mar of	N
TELY WILL	Live part not accessible after parts have been opened by hand or tools	the party while while	N
4.7 (4.30)	Luminaires with non-user replaceable light source		Р
at of	If protective cover provide protection against electric shock and marked with "caution, electric shock risk" symbol:		N
20	At least one fixing means requiring use of tool	Class III	N
4.7 (4.31)	Insulation between circuits		Р
ex write	Circuits insulated from LV supply fulfil requirements according 4.31.1 – 4.31.3	the matrix analysis and the agrand	N
MALTER.	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	MULTER MULTER MULTER MULTER	N
4.7 (4.31.1)	SELV or PELV circuits	There shore shore shore a	Р
in and	Used SELV or PELV source	th with with and	Р
+ //	Voltage ≤ ELV	39 3	Р
The Co	Insulating of SELV or PELV circuits from LV supply	THE RITE WITE MAKE	P



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	IEC 60598-2-4	in the the same	
Clause	Requirement + Test	Result - Remark	Verdict
4.	The state of the s	in in in	
ONE SEELS	Insulating of SELV or PELV circuits from other non SELV or PELV circuits	alter artist artist artists	N
	Insulating of SELV or PELV circuits from FELV		N
e en	Insulating of SELV or PELV circuits from other SELV or PELV circuits	LIE WALLE WALL WALL ON	N
"ALC.	SELV or PELV circuits insulated from accessible parts according Table X.1	MULTER WALTER WALTER WALTER	Р
MULTER	Plugs not able to make any electrical contact with socket-outlets of other voltage systems	White white white white	N
MITER W	Socket outlets does not admit plugs of other voltage systems	aties saids sources sources of	o [©] N _{ol}
itek ani	Plugs and socket-outlets does not have protective conductor contact	er set stet stet stet	et N
4.7 (4.31.2)	FELV circuits	+ 10+ 100+ 150+ 150+	- N
Tres.	Used FELV source	me he he w	N
	Voltage ≤ ELV	at the set set	Ň
	Insulating of FELV circuits from LV supply	The The The Man	N
neter on	FELV circuits insulated from accessible parts according Table X.1	THE MALTER WA	N
iest whis	Plugs not able to make any electrical contact with socket-outlets of other voltage systems	CHIEF WILL SHIFE WILL	N
AND TEN	Socket outlets does not admit plugs of other voltage systems	The street states south	N
.+	Socket-outlets have protective conductor contact	20 20 a	N
4.7 (4.31.3)	Other circuits	INTER WATER WATER WATER	Р
Ties Alle	Other circuits insulated from accessible parts according Table X.1	Tex writer writer writer wr	Р
ek white	Class II construction with equipotential bonding for pro with live parts:	tection against indirect contacts	N
Let.	- conductive parts are connected together	a start of	N
The .	- test according 7.2.3	CITE WITH WILL WILL	N
NETEK IN	- conductive part does not cause an electric shock in case of an insulation fault	THE SITES WITH STITES AND	N
ر بار	- equipotential bonding in master/slave applications	- A	↓ N
i inc	- master luminaire provided with terminal for accessible conductive parts of slave luminaires	Marie Marie Marie Marie	N
· STO	- slave luminaire constructed as class I	· At At Set Set Set	N



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Clause	Requirement + Test	Result - Remark	Verdict

4.7 (4.32)	Overvoltage protective devices		√ N
	Comply with IEC 61643-11		N
r, m	External to controlgear and connected to earth:	LIFE MITE WALLE WALLE	N
et de	- only in fixed luminaires		N
al.	- only connected to protective earth	SIRLE SHILL WILL S	N
4.7 (4.33)	Luminaire powered via information technology cor	nmunication cabling	P
24	Requirements for Class III luminaire	State of the state of	Р
15. 21	Rated voltage within the range of ES1 and does not exceed maximum voltage of used connector	RELIEF MINITE MINITE MINE	Р
the Will	Luminaire does not create any hazard from overvoltage	(see Annex 2)	Р
4.7 (4.34)	Electromagnetic fields (EMF)	A STREET WASTER WHITE ON	J.T.P.
A Contract of the Contract of	No harmful electromagnetic fields	3 B B S	P
4.7 (4.35)	Protection against moving fan blades	Marie Auto Marie And	N
ve in	Test with a standard test finger	The Child Mail	SV N
reik unit	Test with test probe acc. to Figure 13 (IEC 61032) for portable luminaire	The state of	N.
الحار ال	Blades rounded with radius ≥ 0.5 mm and:	30 30 3	N.
"ILES.	- hardness less than D60 Shore	THE STIE WITE ON	N
.+	- peripheral speed less than 15 m/s	All All A	, N
412 4	- input power of fan ≤ 2 W at rated voltage	THE WIFE WILL WALL	N
4.7 (4.36)	Track-mounted luminaires	tel tel stee steel states	uni (Et N
ek atte	Test in accordance with Annex A of IEC60570:2003/AMD2:2019	the set set	N.
4.7.1 (-)	Insulation not damaged when moving, adjusting or placing on support	the the the	Р
4.7.2 (-)	Wiring fixed, to avoid rubbing	meet the the the	Р
nizek w	Carrier or clips of insulation material or with insulating lining	LIET RUFET MALIER WALTER	_U T P
4.7.3 (-)	Luminaire does not overturn:		P
110	- at an angle of 6° for indoor use	the specific specific specific	Р
+ 50°	- at an angle 15° for outdoor use	and the state of	N
4.7.4 (-)	Candlestick luminaires provided with switch	WILL PULL THE THE	N



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	IEC 60598-2-4		
Clause	Requirement + Test	Result - Remark	Verdict
MULTER O	Switch in candlestick luminaires with E5 or E10 lampholders switches all lamps on and off simultaneously	UNLIES WILLIES WILLIES WHILES	N
The Miles	Switch part of the luminaire or within 300 mm of the luminaire if with cord	LIER WILLER WILLER WILLER	N
4.7.5 (-)	Voltage not exceeding 25 V for E5 lampholders	at the set of	N
-24	E10 lampholder voltage:	the the the th	N
NITE.	- not exceeding 60 V for series connection	· the the state state	N
	- not exceeding 250 V for parallel connection	mer mer me an	N
(Pa ^{lifer} - N	Maximum rated wattage does not exceed 100 W	THE THE STREET MATERIAL	N
4.7.6 (-)	Tails not provided for luminaires for outdoor use	he me me at	N
4.7.7 (-)	Not more than two cable entries for luminaires for outdoor use	TEX MULTER MULTER MULTER W	N
4.7.8 (-)	Portable luminaires for outdoor use, socket-outlet degree of protection at least same as the luminaire but not less than IPX4.	Whitek whilek whilek whi	N
Musey 1	Degree of protection maintained with or without a plug inserted into the socket-outlet.	MALTER MILLER WILLIAM WILL	N
in ^{erter} un	Class II luminaires, mains socket-outlets comply with the standard and only allow connection to Class II luminaires	HILLE MILLE	N N
t The	Class I luminaires, mains socket-outlets comply with the standard and only allow connection to Class I or Class II luminaires	CH THE THE THE	N Y
4.7.9 (-)	Lampholders and plugs resistant to tracking for luminaires for outdoor use	See Test Table 4.16 (13.4)	N

4.8 (11)	11) CREEPAGE DISTANCES AND CLEARANCES		Р
4.8 (11.2.1)	Impulse withstand category (Normal category II)	Category II Category III	Walte
Let.	Category III according Annex U		N
Alva.	Protected against pollution, reduced creepage and clearance according Annex P of IEC 61347-1	MULL AND AND AND	N
4.8 (11.2.2)	Creepage distances for frequency up to 30 kHz	See Test Table 4.8 (11.2) I	Р
The Miles	Creepage distances for frequency over 30 kHz:	at the oth sites out	N
+ 36	- Controlgear marked with \hat{U}_{OUT} and f_{UOUT} according IEC 61347-1, clause 7.1, item w	See Test Table 4.8 (11.2) II	N
70	- Requirements according IEC 60664-4 for controlgear not covered by IEC 61347	See Test Table 4.8 (11.2) II	N

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Compliance to clause 13.4



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	IEC 6059	18-2-4	
Clause	Requirement + Test	Result - Remark	Verdict
4.8 (11.2.3)	Clearances for frequency up to 30 kHz	See Test Table 4.8 (11.2) I	Р
	Clearances distances for frequency over 30 l	(Hz:	N
to the	- Controlgear marked with U _P	See Test Table 4.8 (11.2) II	N
SER SINCE	- Requirements according IEC 60664-4 for controlgear not covered by IEC 61347	See Test Table 4.8 (11.2) II	N

4.9 (7)	PROVISION FOR EARTHING	mark which which was
4.9 (7.2.1 + 7.2.3)	Accessible metal parts	NITES WHITES WHITES WITEN
oth so	Metal parts in contact with supporting surface	N N
40	Resistance < 0,5 Ω:	N Share Share And N
*	Self-tapping screws used	+ cot cot sile N
-	Thread-forming screws	N
andre .	Thread-forming screw used in a grove	THE THE METER OF N
	Protective earth makes contact first	N N
nete yen	Terminal blocks with integrated screwless protective earthing contacts tested according Annex V	Antile White Mr PN
	Protective earthing of the luminaire not via built-in control gear	White will N
4.9 (7.2.2 + 7.2.3)	Protective earthing continuity in joints, etc.	Whitek Whitek whitek with
4.9 (7.2.4)	Locking of clamping means	Inities antie white a dr N
Sept 15	Compliance with 4.7.3	A A A A N
4.9 (7.2.5)	Earth terminal integral part of connector socket	N
4.9 (7.2.6)	Earth terminal adjacent to mains terminals	and an an N
4.9 (7.2.7)	Electrolytic corrosion of the protective earth terminal	unite white while we'll
4.9 (7.2.8)	Material of protective earth terminal	STEEL SHITE SHITE OF ST. N.
ste ^{te} Li	Contact surface bare metal	A A A ST S
4.9 (7.2.10)	Class II luminaire for looping-in	N
21/2	Double or reinforced insulation to functional earth	The state of N

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	IEC 605	98-2-4	2
Clause	Requirement + Test	Result - Remark	Verdict
4.9 (7.2.11)	Protective earthing core coloured green-yell	ow	in N
J.	Length of protective earthing conductor	The same of the same	N
4.9 (7.2.12)	PELV circuit connected to protective earth for functional purpose)r	N
in white	The The The Th	set set seek aster with	and the
4.10 (14)	SCREW TERMINALS	r all all a	N-
They	Separately approved; component list	: (see Annex 1)	N
2,4	Part of the luminaire	: (see Annex 3)	A ON

4.10 (15)	0 (15) SCREWLESS TERMINALS AND ELECTRICAL CONNECTIONS		
11/2	Separately approved; component list:	(see Annex 1)	N
it set	Part of the luminaire:	(see Annex 4)	N

4.11 (5)	EXTERNAL AND INTERNAL WIRING		P
4.11 (5.2)	Supply connection and external wiring		Р
4.11 (5.2.1)	Means of connection:	DC inlet	Р
uniter uniter	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	To White white white was	No.
4.11 (5.2.2)	Type of cable:	see Annex 1	N
et .	Nominal cross-sectional area (mm²):	see Annex 1	N
411	Cables equal to IEC 60227 or IEC 60245	the way we have	N
4.11 (5.2.3)	Type of attachment, X, Y or Z	F BUTER MULTER MALTER OF	N.
4.11 (5.2.5)	Type Z not connected to screws	the life site me	N
4.11 (5.2.6)	Cable entries:	the text item that	Р
3	- suitable for introduction	to the the sail	Р
76" NE	- adequate degree of protection	the the the state	P
4.11 (5.2.7)	Cable entries through rigid material have rounded edges	and the tip	Р
4.11 (5.2.8)	Insulating bushings:	Marin Marin Marin Marin	N

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Clause	Requirement + Test	Result - Remark	Verdict
Clause	Requirement + rest	Result - Remark	Verdict
30th	- suitably fixed	A 15 15	N N
3/1, 2/	- material in bushings	with this the M	N
State N	- material not likely to deteriorate	1 1 1 1 1 1 3	N
	- tubes or guards made of insulating material	they are any an	N
4.11 (5.2.9)	Locking of screwed bushings	THE WALTER WALTER	N.
4.11 (5.2.10)	Cord anchorage:	the state of the specific of	mit N
, st	- covering protected from abrasion	9 7 A	N N
iler all	- clear how to be effective	STIES WILL WITH AN	N
A 5	- no mechanical or thermal stress		, N
e dile	- no tying of cables into knots etc.	Ster with militing and	N
المحاكى المج	- insulating material or lining	and the	N N
4.11 (5.2.10.1)	Cord anchorage for type X attachment:		N-
4, 4	a) at least one part fixed	ALL THE ALL	N
لارزور المارا	b) types of cable	at a site of	N
	c) no damaging of the cable		N
ALEX.	d) whole cable can be mounted	THE REPORT OF THE PARTY	N.
الى ا	e) no touching of clamping screws	71, 1, 7	N.
AL.	f) metal screw not directly on cable	STIFF BUTE SHIP.	J. N
_et	g) replacement without special tool	200	A N
412 A	Glands not used as anchorage	NUTE INCTE WILL SH	N
get 3	Labyrinth type anchorages		ot N
4.11 (5.2.10.2)	Adequate cord anchorage for type Y and type Z attachment	of the ret life	W N
4.11 (5.2.10.3)	Tests:	AND AND AND	muset min
J.	- impossible to push cable; unsafe	W. 9, 9, 9	N
ho m	- pull test: 25 times; pull (N):	LITER WITH SMITH WAS	N
de d	- torque test: torque (Nm):		N
, Aug.	- displacement ≤ 2 mm	LE OFFICE WALL SHALL	N
+ 10	- no movement of conductors		N°
211	- no damage of cable or cord	Chie Mary Mary	N



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

50	- function independent of electrical connection	At Set SN
4.11 (5.2.10.4)	Luminaire with/designed for use with supply cord with maximum current	of 2A: N
EK NITE	- Ordinary Class III luminaire supplied with SELV ≤ 25V RMS/60V DC	+ STEEL STEEL N
· Martin	- Ordinary Class III luminaire supplied with PELV ≤ 12V RMS/30V DC	N N
LIEF II	- Other than ordinary Class III luminaire supplied with voltage ≤ 12V RMS/30V DC	STATE OF STAN
n - 20.	Pull test of 30 N	N
4.11 (5.2.11)	External wiring passing into luminaire	et white the N
4.11 (5.2.12)	Looping-in terminals	- Marie Marie M
4.11 (5.2.13)	Wire ends not tinned	P. D.
	Wire ends tinned: no cold flow	N
4.11 (5.2.14)	Mains plug same protection	N.
TER INTE	Class III luminaire plug	M.
	No unsafe compatibility	N
4.11 (5.2.15)	Connectors for Class III luminaires (IEC 60603 or IEC 62680)	White Avere My N
4.11 (5.2.16)	Appliance inlets (IEC 60320)	N
18 S	Installation couplers (IEC 61535)	J. J. J.N
211	Appliance inlet or connector systems (IEC 61984)	N N
4.11 (5.2.17)	No standardized interconnecting cables properly assembled	- Institute and N
4.11 (5.2.18)	Used plug in accordance with	Total State N
	- IEC 60083	N
Received and the	- other standard	N
4.11 (5.3)	Internal wiring	the State of the P
4.11 (5.3.1)	Internal wiring of suitable size and type	P
2/1	Through wiring	The Me In N



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Clause	Requirement + Test	Result - Remark	Verdict
-14400	Trademonia . Took	TOOM TOTAL	VOIGIO
30	- not delivered/ mounting instruction	1 1 1 1 1	√ N
31, 2	- factory assembled	and the sure sure su	N
STEEL MA	- socket outlet loaded (A)	i de de de d	N
- 30	- temperatures	.: (see Annex 2)	N
EE KIL	Green-yellow for protective earth only	at the test state	N
4.11 (5.3.1.1)	Internal wiring connected directly to fixed wiring	the state of	N-
The .	Cross-sectional area (mm²)	.: see Annex 1	N
Sept.	Insulation thickness (mm)	i st st st	√ ^N J
11. 20	Extra insulation added where necessary	about the men the	N
4.11 (5.3.1.2)	Internal wiring connected to fixed wiring via interna	l current-limiting device	Phil Brit
y Jel	Cross-sectional area (mm²)	.: see Annex 1	P.O
4.11 (5.3.1.3)	Double or reinforced insulation for class II	ALTE WHILL WAS MILE	N
4.11 (5.3.1.4)	Conductors without insulation	EX WALTER WALTER WALTER W	N
4.11 (5.3.1.5)	SELV or PELV current-carrying parts	THE MALE WALL	Р
4.11 (5.3.1.6)	Insulation thickness other than PVC or rubber	RE MULTINATURE	W.
4.11 (5.3.2)	Sharp edges etc.	THE STATE STATE	n P
d	No moving parts of switches etc.	A 20	N N
110 21	Joints, raising/lowering devices	at a title and the same	N
d .	Telescopic tubes etc.		, ⊢ N
is the	No twisting over 360°	IN THE WALTER WALL WALL	P
4.11 (5.3.3)	Insulating bushings:	THE STATE STATES SPECIAL	PTE NATE
٠,	- suitable fixed		P-
and a	- material in bushings	THE OUTER MOTHER STOLES	n P
20t-	- material not likely to deteriorate	n	A AP
V. 14	- cables with protective sheath	LIFE MITTER WALL WAS	P. ¹
4.11 (5.3.4)	Joints and junctions effectively insulated	it with outst mark	t N
4.11 (5.3.5)	Strain on internal wiring	all the set set	N.



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	IEC 60598-2-4		
Clause	Requirement + Test	Result - Remark	Verdict
4.11 (5.3.6)	Wire carriers	the sure with sorties	N
4.11 (5.3.7)	Wire ends not tinned	THE LIFE ALTER MATERIA	Р
4 0	Wire ends tinned: no cold flow		N
4.11 (5.4)	Test to determine suitability of conductors having area	a reduced cross-sectional	Р
omiter-	Under test the temperature of the luminaire wiring insulation does not exceed the limits stated in Table 12.2	MINUTES WALTER WALTER WALTER	Р
الماريق عمار	No damage to luminaire wiring after test	LITER STIFF WHITE WALLE	P
4.11.1 (-)	Cord anchorage of luminaire for indoor use made of glass or ceramic not fixed or integral	et set set set seet s	S of N
4.11.2 (-)	For Class I and Class II luminaires for indoor use, if:	The the ten is	N
- Mr. S.	- mass < 1 kg (kg):		N
	- rated current ≤ 2,5 A (A):	A S	N-
" 1 m	- cable length ≤ 2 m (m)	ALTER RELIEF WILLIAM SUNCE	N
nlifet un	- the nominal cross-sectional area of copper conductor ≥ 0,5 mm² (mm²)	ite site.	N
4.11.3 (-)	Terminals, cord anchorage and inlet opening provided for luminaire for outdoor use delivered without a flexible cable or cord and a plug.	THE WILL WHITE WAS	N STREET
4.11.4 (-)	Non-detachable flexible cables or cords not lighter than type 245 IEC 57 for Class I and Class II luminaires for outdoor use.	MALTER MALTER MALTER MALTE	K N. K

4.12 (8)	PROTECTION AGAINST ELECTRIC SHOCK		N
4.12 (8.2.1)	Live parts not accessible	Class III	N
ek white	Basic insulated parts not used on the outer surface without appropriate protection	A STEEL STATES SPECIES SPICE	N
White.	Basic insulated parts not accessible with standard test finger on portable, settable and adjustable luminaires	SUPLIES SUPLIES WALTER SUPLIES.	N
Willey A	Basic insulated parts not accessible with Ø 50 mm probe from outside, other types of luminaires	Lifet whilet whilet while all	N
TER WILL	Lamp and starterholders in portable and adjustable luminaires comply with double or reinforced insulation requirements	EX MILTER MILIER MILIER MILE	N
N. C. C.	Basic insulation only accessible under lamp or starter replacement	MILIER WALTER WALTER WALTER	N

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	IEC 60598-2-4	in the the the	
Clause	Requirement + Test	Result - Remark	Verdict
	Protection in any position	311, 211, 20	N N
W 20	Protection in any position	CONTRACTOR OF THE PERSON OF TH	N
	Double-ended tungsten filament lamp	n. 20, 2, 2	N
- Jan 1	Insulation lacquer not reliable	Comment of the contract of the	N
et e	Double-ended high-pressure discharge lamp	, , , , , , , , , , , , , , , , , , ,	
	Relevant warning according to 3.2.18 fitted to the luminaire	A MULTER MULTER MULTER	W. C.
4.12 (8.2.2)	Portable luminaire adjusted in most unfavourable position	sites outes united	N
4.12 (8.2.3.a)	Class II luminaire:	all the state of	N
	- basic insulated metal parts not accessible	to the the te	N
	- required insulation from live parts in compliance with Table X.1	er milier milier mil	N _U
MALLE	- glass protective shields not used as supplementary insulation	- united whited whited	White William
4.12 (8.2.3.b)	Metal BC lampholder in class I luminaires connected to protective earth	street outer sources	net I I N
4.12 (8.2.3.c)	SELV circuits with exposed current carrying parts:	at Jan 1	SET SET N
	Ordinary luminaire:		N
in their	- voltage under load/ no-load AC (V):		N
	- voltage under load/ no-load DC (V):	71, 14, 4,	N.+
a Partie	- interrupted DC voltage (V):	THE STREET	N II
	- touch current if applicable (mA):	The Assert	, N
110 21	One conductive part insulated	ALTER MATE WALL WI	N
et e	Other than ordinary luminaire:	4	J. J. N
e and	- voltage under load/ no-load AC (V):	the write while whi	N
y del	- voltage under load/ no-load DC (V):	and the set	N.
20,	- interrupted DC voltage (V):	White and and	N
4.12 (8.2.3.d)	PELV circuits with exposed current carrying parts:	ALTER MITTER MATTER	IN N
25	Ordinary luminaire:	70, 2	A N
40 M	- voltage under load/ no-load AC (V):	alter antibe antibe and	N
de d	- voltage under load/ no-load DC (V):	. A A A	* N
, m	Other than ordinary luminaire:	E WILL MULL MULL	N
+ 36th	- voltage under load/ no-load AC (V):	and the state	N
Apr.	- voltage under load/ no-load DC (V):	The Wall Wall	N N

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

	Pole not connected to earth insulated	A CONT
n,	Class III luminaire only for connection to SELV or PELV	N N
4.12 (8.2.4)	Portable luminaire has protection independent of supporting surface	N
4.12 (8.2.5)	Compliance with the standard test finger or relevant probe	N N
4.12 (8.2.6)	Covers reliably secured	antie ante m'N
4.12 (8.2.7)	Luminaire other than below with capacitor > 0,5 μF not exceed 50 V 1 min after disconnection	SPECIAL SPECIAL SPECIAL
JEH NA	Portable luminaire with capacitor > 0,1 µF (0,25) not exceed 34 V 1 s after disconnection	STEP JOSEPH MAN EN MAN
# WALTE	Other luminaires with capacitor > 0,1 µF (0,25) with plug and track adaptors not exceed 60 V 5 s after disconnection	ot write mate w
4.12 (-)	Class I luminaire with bayonet lampholder:	at at N
the .	1) cap not accessible with test finger	The Apr N
164	2) metal lampholder is earthed	A A N

4.13 (12)	ENDURANCE TEST AND THERMAL TEST		Р
4.13 (-)	If IP > IP 20 relevant test of (12.4), (12.5), (12.6) and (12.7) after (9.2) but before (9.3) specified in 4.14		3.5
4.13 (12.2)	Selection of lamps and ballasts	with the same and	Te _k
me m	Lamp used according Annex B	(Lamp used see Annex 2)	, — g ₁
at the	Controlgear if separate and not supplied	(Controlgear used see Annex 2)	&—_ ₹
4.13 (12.3)	Endurance test	the antice must any any	Р
2/12	a) mounting-position:	As in normal used	2/2
. At	b) test temperature (°C):	35 °C	
7/10	c) total duration (h)	240 h	100
Set .	d) supply voltage (V):	- A B B B	50 ^t
The Second	d) if not equipped with controlgear, constant voltage/current (V) or (A):	1.1 x 5V	4 – 3
1.13 (12.3.1d)	d) Class III luminaires powered via information techno	logy communication cable:	- Col-
and the	- voltage under normal operation (V):	1.1 times rated voltage	3/12
J.	- voltage under abnormal operation (V):	1.3 times rated voltage	

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	IEC 60598-2-4	in the the the	
Clause	Requirement + Test	Result - Remark	Verdict
2.	The second secon	310, 310, 31	34
	e) luminaire ceases to operate	and the set	Ser Ser
24, 3	f) luminaire with a constant light output function	They are the t	Р
4.13 (12.3.2)	After endurance test:	nites inites unites uni	Р
et se	- no part unserviceable		P
-de-	- luminaire not unsafe	the water where where	Р
	- no damage to track system	and the state of	N N
41	- marking legible	College College College	Р
Step.	- no cracks, deformation etc.	at let let	of P
4.13 (12.4)	Thermal test (normal operation)	(Annex 2)	Р
4.13 (12.5)	Thermal test (abnormal operation)	(Annex 2)	Р
4.13 (12.6)	Thermal test (failed lamp control gear condition):	ed white white white	N
4.13 (12.6.1)	Through wiring or looping-in wiring loaded by a current of (A):	Whitek whitek whiteh	nite (drie
J. C. C.	- case of abnormal conditions:	# 1 A A	56th 25th 0
-	- electronic lamp control gear	2 July 24	N
THE WALL	- measured winding temperature (°C): at 1,1 Un:	- 10 Jan 150	5 N. C. S. W. C.
L. C.E.	- measured mounting surface temperature (°C) at 1,1 Un:	A St. St.	N
3	- calculated mounting surface temperature (°C):	Mer aler ale	N
J. S.	- track-mounted luminaires	18 18 58 5	N.
4.13 (12.6.2)	Temperature sensing control	where the set of	+ N
20	- case of abnormal conditions:	the whole they are	24 - 24.
of the	- thermal link	1 1 1 1 50	N.
2,	- manual reset cut-out	in the the the	N
(ALTER	- auto reset cut-out	the cent cent	N. S.
200	- measured mounting surface temperature (°C):	24 m. 34 .	N
الد سختي	- track-mounted luminaires	TER STER STER OF	N _o
4.13 (12.7)	Thermal test (failed lamp control gear in plastic lu	ıminaires):	# 3 # N
4.13 (12.7.1)	Luminaire without temperature sensing control	The state of	N

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Verdict

Clause	Nequilement + rest	INESUIL - INEITIAIN	Verdict
A.	and the site of th	The the the	
4.13 (12.7.1.1)	Luminaire with fluorescent lamp ≤ 70W		N
Note and	Test method 12.7.1.1 or Annex W:	TEX STEX STEE STIFE ON	55 - 10
A	Test according to 12.7.1.1:	6. m. m.	N
C. William	- case of abnormal conditions:	the stiff of the spitt only	-34°
- 15	- Ballast failure at supply voltage (V):	The state of the state of	
2 Hree	- Components retained in place after the test	CLIFF WALTE WALT WALT	N
, de	- Test with standard test finger after the test	a state	. N
	Test according to Annex W:	inite with which which is	N
in it	- case of abnormal conditions:	a state of the state of	
211	- measured winding temperature (°C): at 1,1 Un:	the Auto and Aur Au	<u> </u>
EM WALTER	- measured temperature of fixing point/exposed part (°C): at 1,1 Un:	t whitek whitek whitek white	WITE
WALTER	- calculated temperature of fixing point/exposed part (°C)	salter states whater southers	JULIER OF
et .	Ball-pressure test:	See Test Table 1.15 (13.2.1)	N
4.13 (12.7.1.2)	W, transformer > 10 VA	N	
77	- case of abnormal conditions:	and any and	
WITE.	- measured winding temperature (°C): at 1,1 Un:	The the state of	unit.
Jet .	- measured temperature of fixing point/exposed part (°C): at 1,1 Un:	AL ALL THE THE	LITE III
The second	- calculated temperature of fixing point/exposed part (°C)	ner and an an	(d) — (d)
er m	Ball-pressure test:	See Test Table 1.15 (13.2.1)	N
4.13 (12.7.1.3)	Luminaire with short circuit proof transformers ≤ 10 VA	A MULTER WILLIEF WILLIEF WILLIAM	N
JALTE	- case of abnormal conditions:	The lift with and	. NO. 3
	- Components retained in place after the test	m m m	N
الله مستندال	- Test with standard test finger after the test	LIE REFERENCE WITE WALLE	N
4.13 (12.7.2)	Luminaire with temperature sensing control	all the state with the	N
	- thermal link:	Yes No	4 -24
a marine	- manual reset cut-out:	Yes No No	311-61
z.É	- auto reset cut-out:	Yes No	-



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	IEC 60598-2-4	in the many many	
Clause	Requirement + Test	Result - Remark	Verdict
A FEET	- case of abnormal conditions:	30° 30° 40° 40°	
ali - C	- highest measured temperature of fixing point/ exposed part (°C)::	The state of the state of	_
S 40	Ball-pressure test:	See Test Table 4.15 (13.2.1)	N
4.13 (-)	Luminaire for indoor use tested in overturned position (overturns < 15°)	Overturned	Р

4.14 (9)	RESISTANCE TO DUST AND MOISTURE		Р
4.14 (-)	If IP > IP 20 the order of tests as specified in clause 4	.13	et cN
4.14 (9.2)	Tests for ingress of dust, solid objects and moisture:		
ight Cillian	- classification according to IP:	IP20	" +11
+ 4	- mounting position during test:	As in normal used	, d - 3
21/2	- fixing screws tightened; torque (Nm):	- INCIE WILL WILL V	10, 10
S. Carlo	- tests according to clauses:	9.2.0	at Let
10,	- electric strength test afterwards	MULL MULL MULL SAL	Р
Set o	a) no deposit in dust-proof luminaire		N
, 2,	b) no talcum in dust-tight luminaire	and the same	N
	c) no trace of water on current-carrying parts or on insulation where it could become a hazard	The state white	N.
- INLTER	c.1) For luminaires without drain holes – no water entry	STIFF STIFF STIFF	NE SILVER
NITER .	c.2) For luminaires with drain holes – no hazardous water entry	set iset uset wi	SELF STEEN
IFEK JUN	d) no water in watertight, pressure watertight, high pressure and temperature water jet-proof or high pressure and cold-water jet-proof luminaire	TER POTER MATER	N All
+ ,4	e) no contact with live parts (IP 2X)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Р
2/2	e) no entry into enclosure (IP 3X and IP 4X)	WALLE SALLY SALLY	N
MILLEY.	e) no contact with live parts through drain holes and ventilation slots (IP3X and IP4X)	THE STEEL STATES	UNION N
NITET AN	f) no trace of water on part of lamp requiring protection from splashing water	The The Little of	N N
	g) no damage of protective shield or glass envelope	The The Shi to	N
4.14 (9.3)	Humidity test 48 h	EX MILIER MILIER MILIER	, P



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

4.15 (10)	INSULATION RESISTANCE AND ELECTRIC STREN	GTH	P
4.15 (10.2.1)	Insulation resistance test	need when when the	Р
r '1 ₀ ,	Cable or cord covered by metal foil or replaced by a metal rod of mm Ø :	Covered by metal foil	Р
" INCO	Insulation resistance (MΩ):	et the the nite.	P
A	SELV or PELV:	h, h, ,	Р
11/1/2	- between current-carrying parts of different polarity:	LITER RITER WITE ON	N
NITEK SU	- between current-carrying parts and mounting surface:	100 ΜΩ	Р
SEP MAI	- between current-carrying parts and metal parts of the luminaire:	100 ΜΩ	Р
e white	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts:	THE NATE OF THE SHIP	N
3	- Insulation bushings as described in Section 5:	An an	N
No.	Other than SELV or PELV:	STEEL WITE SHIFT WAS	N
d.	- between live parts of different polarity:		N
in the	- between live parts and mounting surface:	THE WALL WALL	N
t s	- between live parts and metal parts:		/ N
31P2 413	- between live parts of different polarity through action of a switch:	and min and	N
AUT.	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts:	White white white wh	N
10. 20	- Insulation bushings as described in Section 5:	Will Mary and May	N
1.15 10.2.2)	Electric strength test	TEX MITTER MILITER MINITER	uni P
+ 16	Dummy lamp	and the state of	N
n.	Luminaires with ignitors after 24 h test	antile antile one of	Ν
Set	Luminaires with manual ignitors	in the state of	o N
A. A	Luminaires with ignitors provided with ballasts conforming to IEC 61347-2-9	ante unit unt un	N
in 14	SELV or PELV:	NITE MITTER MALL MALL	Р
et d	- between current-carrying parts of different polarity:		J N
'hur.	- between current-carrying parts and mounting surface:	500V	Р
The state of	- between current-carrying parts and metal parts of the luminaire:	500V	Р



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IEC 60598-2-4					
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:	NATED SHALLER WALLER SHALLER OF	Ñ
ال المعاني	- Insulation bushings as described in Section 5:	cet it it is nited and	N
	Other than SELV/PELV:	70, 20, 2	N
e and	- between live parts of different polarity:	- cies scies miles sonit	N
	- between live parts and mounting surface:	741 74	N -
100	- between live parts and metal parts:	STEE STEE STIFF STORY	N
nite ^k	- between live parts of different polarity through action of a switch:	THE THE CLICK NATER OF	N
TEX SUL	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts:	Et MITER WITTER WITTER WITE	N Suns
	- Insulation bushings as described in Section 5 :	a de de la	N
4.15 (10.3)	Touch current (mA):	Murit Mirr Mirr Mirr	N
area.	Protective conductor current (mA):	THE STEE STEE SPITE SPITE SHE	N

4.16 (13)	RESISTANCE TO HEAT, FIRE AND TRACKING			
4.16 (13.2.1)	Ball-pressure test:	See Test Table 4.16 (13.2.1)	P	
4.16 (13.3.1)	Needle-flame test (10 s):	See Test Table 4.16 (13.3.1)	Р	
4.16 (13.3.2)	Glow-wire test (650°C):	See Test Table 4.16 (13.3.2)	Р	
4.16 (13.4)	Proof tracking test (IEC 60112):	See Test Table 4.16 (13.4)	N	



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

4.8 (11.2)	TABLE I: C	reepage dista	nces and clea	rances			Р
A 1	Minimum di	istances (mm) for a.c. up to	30 kHz sinu	soidal voltage	S	200
ir, the	Applicable	part of IEC 60	598-1 Table 1	1.1.A*, 11.1.E	B* and 11.2* an	d Table U.1*	2, 3
Distances	Insulation	Measured	Requ	uired	Measured	Requir	ed
Distances	type **	clearance	clearance	*Table	creepage	creepage	*Table
- Set	LIFE CLIFE	White the	3/67. 1		. J.	St St	- 36
Working vo	ltage (V)			:	Carrier States	me me	_
PTI				:	< 600 🗌	≥ 600 □	300
Pulse volta	ge or <i>U</i> _P if ap	plicable (kV)		n:,i	2 " " " " " " " " " " " " " " " " " " "	L 10 .	_
Supplemen	tary information	on: Class III wo	ork light, Max. i	nput 5VDC	et let e	CENT CEEPER OF	5 J
	1	t st	Ter Ster	WILL MILL	me, m		
Working vo	ltage (V)	11/2 21/			18th 50	e suice south	100
PTI			11	:	< 600 🗌	<u>></u> 600 □	-
Pulse volta	ge or <i>U</i> _P if ap	plicable (kV)		<i></i>	5 C. St. St. C.	INTE WITE	10 m
Supplemen	tary information	on:	Ja 200	-113			
ver and	NVA	7		OF B		ara a	N 1
Working vo	ltage (V)		12 16	· · · · · · · · · · · · · · · · · · ·		+ 5-	e + -
PTI	24 2			:	< 600 🗌	<u>></u> 600 □	-20
Pulse volta	ge or <i>U</i> _P if ap _l	plicable (kV)		:	1	d d	- 3
Supplemen	tary information	on:	4 5 ⁶ 3	The second	With Miles	The Sh	2,,
** Insulation	n type: B – Ba	sic; S – Suppl	ementary; R –	Reinforced. S	See also IEC 60	598-1 Annex M.	The state of the s
24, 2,		at at	State State	10.25	State of	10	3.
Working vo	ltage (V)			:	est gest i	Set John a	√ <u></u>
PTI		<u></u>		::	< 600 🗌	≥ 600 □	
Pulse volta	ge or <i>U</i> _P if ap	plicable (kV)			· 51th 51th	TOTE THE	100
	tary information		Et Wille W	La Alexander	20, 20,		
			ementary: R –	Reinforced S	See also IEC 60	598-1 Annex M.	are of the



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

4.8 (11.2)	TABLE II: C	reepage dis	tances and cle	earances			N
J 1	Minimum d	istances (mr	n) for a.c. high	ner than 30 k	Hz sinusoidal	voltages	3
be the	Applicable	part of IEC 6	1347-1 Table	7 and 8* or IE	EC 60664-4 Tal	ble 1 and 2	16. A
et et	Insulation	Measured	Requ	ired	Measured	Requir	red
Distances	type **	clearance	clearance	*Table	creepage	creepage	*Table
Distance 1:	LIE WITE	all Care	a sheen	7	.4 .0	- 10 1	* 30°
Working vo	Itage (V)			::	with the	an an	332
Frequency	if applicable (kHz)	100	:	at at	Letter Selfer	300
PTI					< 600 🗌	≥ 600 □	- S
Peak value	of the workin	g voltage Û _{ou}	t if applicable (I	⟨V):	y 15	det det o	J
Supplemen	tary information	on:	Ser Ste	Mrs. Mrs.	24, 24,		
Distance 2:	Will Aug	m, 1		# 10	Sept. 5	A STEEL SING	
Working vo	Itage (V)			:	14. 14.		
Frequency	if applicable (kHz)		:	50 50	THE WALL	1/2
PTI				:	< 600 □	≥ 600 □	.0-
Peak value	of the workin	g voltage Û _{ou}	if applicable (I	⟨V):		Will Miller	10° 70
Supplemen	tary information	on:	100			A. S.	, d ⁴
Distance 3:	3/1		1 10	J. 100 J. 150	The state of	21/2 41	-7/2
Working vo	Itage (V)			:		t dt d	۶ ر
	175	DAM NO.	4		STATE STATE	314, 314	26,0
				160 (2002)	< 600 □	≥ 600 □	J. C.
			t if applicable (I	N (0)	A 100	24.6 24.6.	-
	tary information			, , , , , , ,	A 18	de de	J. C. J.
		71 TO	lementarv: R –	Painforced	Chronical Con	S. 240 4	1. 24

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

4.16 (13.2.1)	TABLE: Ball Pres	ssure Test of Therr	noplastics	White Mark of P
Allowed in	mpression diameter	(mm)	.: 2	ALTER MATERIAL STATE
Object/	Part No./ Material	Manufacturer/ trademark	Test temperature (°C)	Impression diameter (mm)
PCB	- J- J- J	See Annex 1	125.0	1.1
DC inlet	Will Mrs. Mrs.	See Annex 1	125.0	1.3
LED board		See Annex 1	125.0	1.1
Suppleme	ntary information:	The The ,	at at the self	L STEE STEE WITE SI

4.16 (13.3.1)	TABLE: N	leedle-flame test (IE	C 60695-11-5)			Р
Object/ Pa		Manufacturer/ trademark	Duration of application of test flame (ta); (s)	Ignition of specified layer Yes/No	Duration of burning (tb) (s)	Verdict
PCB	C. We	See Annex 1	10	No	0	Р
DC inlet		See Annex 1	10	No	0	Р
LED board See		See Annex 1	10	No No	0	Pol

4.16 (13.3.2)	TABLE: Glow-	ABLE: Glow-wire test (IEC 60695-2-11)					
Glow wire	temperature	650°C	he me me	Marie Carlo	-		
Object/ F Mate		Manufacturer/ trademark	Ignition of specified layer Yes/No	Duration of burning (tb) (s)	Verdict		
Lamp cove	er	See Annex 1	30	ALN AL	0		
Plastic end	closure	See Annex 1	30	∠N ≺	0		

4.16 (13.4) TABLE: Proof tracking test (IEC 60112)					
Test voltage PTI		and the state of	THE LIGHT		
Object/ Part No./ Material	Manufacturer/ trademark	Withstand 50 drops without failure on three places or on three specimens			
and the second	a de de	alter nate mais and as	r. 20 - 70		
Supplementary information:					

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

	ANNE	EX 1 components				P	
object/part No.	code manufacturer/ trademark		type/model	technical data	standard	mark(s) of conformity	
DC inlet	В	NANTONG ORIENT PLASTICS CO LTD	3080 G(zz)	V-0; PBT	They are	UL E332375	
Internal wire	В	SHENZHEN DINGYU ELECTRICAL TECHNOLOGY CO LTD	2464	300V; 22AWG, 80°C,	inter antier an	UL E365423	
Internal PCB, LED board	В	KINGBOARD LAMINATES HOLDINGS LTD	KB-5150	130°C	WALT	UL E123995	
Wireless speaker	В	Shenzhen hongrishengwei Technology Co., Ltd	MO9675	Input:5Vdc, 2.4A; Wireless ouput:5W	EN 62368	WTF21D091 03358Y	
LED WE	В	Shenzhen XGM Technology Co., Ltd.	XGM- 2835SAW- O360 XGM- 2835SAW- O363	I _F =60mA; 2500- 6500K	IEC/TR 62778	Tested with appliance	
LED board	В	SHENZHEN TONGCHUANGXIN ELECTRONICS CO LTD	TCX-1	V-0; AI	MULTER WHITE	UL E250336	
Lamp cover	В	Dongguan xinhaoyuan guijiao Technology Co., Ltd.	WINLIEK WINLIN	Silica	nis wais.	Tested with appliance	
Plastic enclosure	В	GUANGDONG WAYLAM ENGINEERING PLASTICS CO LTD	PC-F2805	PC;V-0	* White whi	UL E257285	

The codes above have the following meaning:

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



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	.31		1 St	IEC 6059	98-2-4	415. 411			
Clause	Req	uirement +	Γest	2/1	مي خي	Result - Remark	k sitt sitt	Verdict	
ANNEX 2	TABI	E: Temper	ature meas	urements, th	ermal tes	sts of Section 12	2 Lifet Milet	P	
A 10	Typo	roforonco	The state of		7/2	M00675	7 4 61 4	Jos	
						47 4V	\$		
* *			J 1				, 		
	<u> </u>				('' (- 37		
	~		<u> </u>	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	250	Acc. to user ma	inuai		
27.520 55.31							ans and	1/1-	
								- C- 11	
						37 - 37	10 10 1	_	
				es corrected			A 36 P	P	
						Overturned pos	Р		
- test 1: rated volt					A	·			
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage				1.1 times rated	7.0			
	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage:				White white	-112 - 1			
				ge or 1,05 tim		1.1 times rated	try —n		
				wiring loaded		THE WALTER WALTER WALTER			
it willer th		unite uni	in and	Temperatur	e measu	rements, (°C)	· LIFE NITE	ell life.	
		Clause 12.4 – norm				Clause 12.5 –		abnorma	
Part	الۍ	Ambient	test 1	test 2	test 3	limit	test 4	limit	
DC inlet		25.0	NT EF N	34.9	31	Ref.	1 - 1		
Touch switch button	n. m.	25.0	4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 -	33.0	TELES PA	55	n	r w	
Ambient of too switch	uch	25.0	st sit	29.9		55	CAUTE ALL	-41	
PCB of switch	1	25.0	Jan Jan	75.1		Ref.	- KIN- SIN		
Input wire of switch		25.0	INITER V	51.4	Mr. Cr	80	- AT		
Internal wire of speaker	of	25.0	TET JOS	30.3	Marie -	80	11		
Wireless spea (surface)	ker	25.0	#	27.9	Cless - one	75	The MUTTER OF A		
Lead wire of	LED	25.0	7.0	42.0	2 - Z	80	\$ 15th 15th	nite	
Lamp cover	,elle	25.0	yy+	31.3	12	Ref.	ch	-	



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			IEC 6059	8-2-4			
Clause Rec	uirement +	Test	Alle a	4 1	Result - Remark	- 50th 13	Verdict
10. 0	-14-	+ 4	- Car - Car		The Me	n. n.	
Plastic enclosure of lamp part	25.0	71/2 A	26.1	, , , , , , , , , , , , , , , , , , , 	Ref.	ALTER WALTE	WILLER OF
Plastic cover of bottom	25.0	WILLER WIL	59.5	alles	Ref.	SEX TEX	mire <u>k</u>
Plastic enclosure of bottom	25.0	RUTER WALTE	48.2	1 ¹ 1 ¹	Ref.	- 10	JEL JE
Adjustment non- metal part (and 5cm around)	25.0	Tek wittek	26.2	- J <u>r</u> i	75	ur u	et Tiet
PCB of Wireless charging	25.0	t white wi	55.5	m.	Ref.	et - et	STEP 18
LED board	25.0	<i>#</i> (53.4	RETURN.	Ref.	-1	4, - 2,
Mounting surface	25.0	ance - and	28.0		90	36.2	175
Illuminated surface (0.1m)	25.0	TEF NITE	27.0	icie "in	90	29.9	130





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1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	IEC 60598-2-4	the Mary Mary	100	-4-
Clause	Requirement + Test	4	Result - Remark	V	erdict

ANNEX 3	Screw terminals (part of the luminaire)		N
(14)	SCREW TERMINALS	A A A A	o N
(14.2)	Type of terminal		
Cliff California	Rated current (A)	the feet of the country	(17 ¹²⁾
(14.3.2.1)	One or more conductors	The Au an a	N
(14.3.2.2)	Special preparation	THE THE REPORT OF	N
(14.3.2.3)	Terminal size	74 A. A. A.	N
William Miles	Cross-sectional area (mm²)	The state state state	J 10 - 3
(14.3.3)	Conductor space (mm)	10. 20. 4	, N
(14.4)	Mechanical tests	LIET SLIFE WILLES SHIP	ar Nr
(14.4.1)	Minimum distance	* * *	_ N <
(14.4.2)	Cannot slip out	the matter and the whole of	N
(14.4.3)	Special preparation	1 1 1 1 1	N N
(14.4.4)	Nominal diameter of thread (metric ISO thread)	M	N
de de	External wiring		N
10. 94	No soft metal	The same	N
(14.4.5)	Corrosion		N
(14.4.6)	Nominal diameter of thread (mm)	and the same	N
S. C. C.	Torque (Nm)	at the state of	N
(14.4.7)	Between metal surfaces	the the the	N
INITE SINI	Lug terminal	let light light mil	N
, ,	Mantle terminal	The the the sail	N
Life White	Pull test; pull (N)	TEN TEN STEE STEE	N
(14.4.8)	Without undue damage	1 21 21 21 21 21 21 21 21 21 21 21 21 21	N



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10	2 12 15 15 1	EN 60598-2-4	5 30 30 A
Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 4	Screwless terminals (part of the luminaire)	THE STEEL ST.
(15)	SCREWLESS TERMINALS	N
(15.2)	Type of terminal	Thirty and the
a d	Rated current (A)	
(15.3.1)	Material	and and N
(15.3.2)	Clamping	N.
(15.3.3)	Stop	N St. N
(15.3.4)	Unprepared conductors	A A N
(15.3.5)	Pressure on insulating material	N
(15.3.6)	Clear connection method	N.
(15.3.7)	Clamping independently	ALC ALL N
(15.3.8)	Fixed in position	N CON
(15.3.10)	Conductor size	N
at the last	Type of conductor	A ST N
(15.5)	Terminals and connections for internal wiring	N
(15.5.1)	Mechanical tests	N
(15.5.1.1.1)	Pull test spring-type terminals (4 N, 4 samples):	N
(15.5.1.1.2)	Pull test pin or tab terminals (4 N, 4 samples):	N.
	Insertion force not exceeding 50 N	N
(15.5.1.2)	Permanent connections: pull-off test (20 N)	Mark Service
(15.5.2)	Electrical tests	N
They were	Voltage drop (mV) after 1 h (4 samples):	N N
st st	Voltage drop of two inseparable joints	L JE OFN
in our	Number of cycles:	They are the
ek merek	Voltage drop (mV) after 10th alt. 25th cycle (4 samples):	AND THE MINISTER OF THE
INLIER SIN	Voltage drop (mV) after 50th alt. 100th cycle (4 samples)	LIET MITET IN N
STORE STORE	After ageing, voltage drop (mV) after 10th alt. 25th cycle (4 samples)	et set seeN
it w	After ageing, voltage drop (mV) after 50th alt. 100th cycle (4 samples):	N
(15.6)	Terminals and connections for external wiring	N SIP
(15.6.1)	Conductors	N N
an a	Terminal size and rating	n an an N
15.6.2	Mechanical tests	A A N

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	EN 60598-2-4	ry Alexander	2.
Clause	Requirement + Test	Result - Remark	Verdict
(15.6.2.1)	Pull test spring-type terminals or welded connection (4 samples); pull (N)		N S
(15.6.2.2)	Pull test pin or tab terminals (4 samples); pull (N)	and the state with	TEXT SELV
(15.6.3)	Electrical tests	6 M 10 10	N
1/2	Tests according 15.6.3.1 + 15.6.3.2 in IEC 60598-1	10th of the of the sails	N

(15.6.3.1) (15.6.3.2)	TABLE	E: Contact	resistar	nce test	/ Heating	g tests					N
STER IN	Voltage	e drop (mV	/) after 1	h	۸,		d	76°	Jet .	Jeth .	J.C
terminal		1	2	3	4	5	6	7	8	9	10
voltage dro	p (mV)	they !	in 1		3	J.	d i	of the	et in	S. 100	
	\ \	oltage dro	p of two	insepara	ble joints	31	. 1/2	3,			
	1	oltage dro	p after 1	0th alt. 2	5th cycle	+ 1	+ 56	- 50°	- 100	JI LITE	are.
	N	/lax. allowe	ed voltage	e drop (r	nV)		m.	3,			-
terminal	2 1/2	1	2	3	4	5	6	7	8	9	10
voltage dro	p (mV)	"	ď	100	38	115	3/1	i z		.+	, et
a m	\	oltage dro	p after 5	0th alt. 1	00th cycl	e	. G*	200	See Mr	10	
it it	N	/lax. allowe	ed voltage	e drop (r	nV)	:		1	24 3	<i>*</i>	<i>*</i>
terminal	in	1	2	3	4	5	6	7	8	9	10
voltage dro	p (mV)	No The		. 10	-507				15	160	
2/12 2	C	Continued	ageing: v	oltage d	rop after	10th alt.	25th cyc	le	20	190	21
John S	N	/lax. allowe	ed voltag	e drop (r	nV)	:	٠,٠	3	Let.	50	110
terminal		1 1	2	3	4	5	6	7	8	9	10
voltage dro	p (mV)	West.	ar.	* ₁ ,		.4.	A.	est (of s	·	
, ,	C	Continued	ageing: v	oltage d	rop after	50th alt.	100th cy	cle	500		
The state of	N N	/lax. allowe	ed voltage	e drop (r	nV)	:	* .4	£ 36		1000	
terminal		J-1 3	2	3	4	5	6	7	8	9	10
voltage dro	p (mV)	200	24			10	J. Carlot	25.00	Willey.	and .	no.
					110	000	41	30			



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	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	EN 60598-2-4	20, 20
Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 5	National Differences for (country name) or Group Differences	P
at s	the fifth with with with with all the contract of the contract	est.
r. m	CENELEC COMMON MODIFICATIONS (EN)	Р

ATTACHMENT TO TEST REPORT IEC 60598-2-4 EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES

Luminaires

Part 2: Particular Requirements:

SECTION 4: PORTABLE GENERAL PURPOSE LUMINAIRES

Differences according to	EN 60598-2-4:2018 used in conjunction with EN IEC 60598-1:2021

Annex Form No.....: -
Annex Form Originator: -
Master Annex Form ...: --

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1/2	CENELEC COMMON MODIFICATIONS (EN)	Р

4.5 (3)	MARKING	N
4.5 (3.3.101)	For luminaires not supplied with terminal block: Adequate warning on the package	N

4.6 (4)	CONSTRUCTION	Р
4.6 (4.11.6)	Electro-mechanical contact systems	Р

4.10 (5)	EXTERNAL AND INTERNAL WIRING	P.
4.10 (5.2.1)	Connecting leads	
STATE W	- without a means for connection to the supply	N N
A+ .	- terminal block specified	N.
White Mr.	- relevant information provided	N
NITER ANITE	- compliance with 4.6, 4.7.1, 4.7.2, 4.10.1, 11.2, 12 and 13.2 of Part 1	× SON
4.10 (5.2.2)	Cables equal to EN 50525	N
COLUMN TO THE PARTY OF THE PART	Replace table 5.1 – Supply cord	N



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345	L A B B	EN 60598-2-4	The The
Clause	Requirement + Test	Result - Remark	Verdict

4.12 (12)	ENDURANCE TESTS AND THERMAL TESTS		N
t t	Thermal test (normal operation) see footnote c to table 12.2 relating to unsleeved fixed wiring	and want want water and	N

ZB	ANNEX ZB, SPECIAL NATIONAL CONDITIONS ((EN)	N
(3.3)	DK: power supply cords of class I luminaires with label	the state of	N
(4.5.1)	DK: socket-outlets	Maria Albert Albert Albert	N
(5.2.1)	CY, DK, FI, GB: type of plug	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N

ZC	ANNEX ZC, NATIONAL DEVIATIONS (EN)	N
(4 & 5)	FR: Shuttered socket-outlets 10/16A	N
yning ynigh ynigh yn	FR: Safety requirements for high buildings (Arrêté du 30 décembre 2011 portant règlement de sécurité pour la construction des immeubles de grande hauteur et leur protection contre les risques d'incendie et de panique; Section VIII; Article GH 48, Eclairage) Glow-wire test for outer parts of luminaires:	WILL N
lik Tek	- 850°C for luminaires in stairways and horizontal travel paths	N
7412	- 650°C for indoor luminaires	N
(13.3)	GB: Requirements according to United Kingdom Building Regulation	Ñ

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345		EN 61347-2-11	NITE WALL MILE MY	- 20, -20,
Clause	Requirement + Test	411	Result - Remark	Verdict

ANNEX 6	The requirements for dimmer switch according t	o standard EN 61347-2-11	_ P ≺
			<i>J</i> 4-
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 N
- (4)	Compliance of independent controlgear enclosure with IEC 60 598-1	sites mites writes and	N
- (4)	Built-in magnetic ballast with double or reinforced insulation comply with Annex I of IEC 61347-1	THE SEAR ASSESSMENT	N N
- (4)	Built-in electronic controlgear with double or reinforced insulation comply with Annex O of IEC 61347-1	(see Annex O)	SEEK N
- (4)	SELV controlgear comply with Annex L of IEC 61347-1	(see Annex L)	e Ne

6 (6)	CLASSIFICATION	the the atternation with a state	J P
d.	Independent controlgear:	Yes ☐ No ☒	.d
ver an	Built-in controlgear:	Yes ☐ No ☒	10 - 10 - 10 -
at di	Integral controlgear:	Yes ⊠ No □	4 – K

7	MARKING	N N
7/10	Requirements not applicable to the evaluated product	20 M

8 (10)	PROTECTION AGAINST ACCIDENTAL CONTACT	T WITH LIVE PARTS	N
- (10.1)	Controlgear protected against accidental contact with live parts	Class III	N SIN
- (A2)	Voltage measured with 50 kΩ	(see Annex A)	, N
- (A3)	Voltage > 35 V peak or > 60 V d.c. or protective impendance device	(see Annex A)	N
- (10.1)	Lacquer or enamel not used for protection or insulation	ANTITE WATER WATER WATER	N
Willey Mus	Adequate mechanical strength on parts providing protection	A THE WALTER WALTER	N.
- (10.2)	Capacitors > 0,5 μF: voltage after 1 min (V): < 50 V:	of the state of the state of the state of	N.
- (10.3)	Controlgear providing SELV		N O



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100		EN 61347-2-11	347-2-11		. A
Clause	Requirement + Test	4	Result - Remark	Verdi	ct

		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	Accessible conductive parts are insulated from live parts by double or reinforced insulation in SELV controlgear	N And the N
* 20*	No connection between output circuit and the body or protective earthing curcuit	N N
SITER	No possibility of connection between output circuit and the body or protective earthing circuit through other conductive parts	the set set with mith
	SELV outputs separated by at least basic insulation	A ST ST N
L 20	ELV conductive parts insulated as live parts	en an an N
set site	Tests according Annex L of IEC 61347-1	A A SE N
(10.4)	Accessible conductive parts in SELV circuits	N N
MALE	Output voltage under load ≤ 25 V r.m.s. or ≤ 60 V d.c.	Et WILLER MILLER MILLER
Whitek W	If output voltage > 25 V r.m.s. or > 60 V d.c.; No load output ≤ 35 V peak or ≤ 60 V d.c and touch current does not exceed 0,7 mA (peak) or 2 mA d.c	white white white
r et win Tek antre	One conductive part is insulated if output voltage or current exceeding the values above and withstand test voltage 500 V	N N
PARTER .	Double or reinforced insulation bridged by appropriate and at least two resistors or two Y2 capacitors or one Y1 capacitor	* Antick water antick was
de a	Y1 or Y2 capacitors comply with IEC 60384-14	A A ST SN
in in	Resistors comply with test (a) in 14.1 of IEC 60065	and and and N

9 (8)	TERMINALS	a start	N
- (8)	Screw terminals according section 14 of IEC 60598-1:		N
	Separately approved; component list	(see Annex 1)	N N
711.	Part of the controlgear	(see Annex 2)	N
Little 10	Screwless terminals according section 15 of IEC 60598-1:		ST N
	Separately approved; component list	(see Annex 1)	N
The Cold	Part of the controlgear	(see Annex 3)	N

10 (9)	PROVISION FOR PROTECTIVE EARTHING	N
- (9.1)	Provisions for protective earthing	N

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

	Terminal complying with clause 9	N
STEE MILT	Locked against loosening and not possible to loosen by hand	N W
et stet	Not possible to loosen clamping means unintentionally on screwless terminals	N
40	Earthing via means of fixing	N
ALTER O	Earthing terminal only used for the earthing of the control gear	N
ini.TEPE vini	All parts of material minimizing the danger of electrolytic corrosion	N
at d	Made of brass or equivalent material	⇒ N
- the	Contact surface bare metal	N
- (9.2)	Provision for functional earthing	N
74, .	Comply with clause 8 and 9.1	N
- (9.3)	Earth contact via the track on the printed board	N
NETER WALL	Test with a current of 25 A between earthing terminal and each of the accessible metal parts; measured resistance (Ω) at \geq 10 A according 7.2.3 of IEC 60598-1: < 0,5 Ω	N
- (9.4)	Earthing of built-in lamp controlgear	N
CER	Earth by means of fixing to earthed metal of luminaire in compliance of 7.2 of IEC 60598-1	N
All I	Earthing terminal only for earthing the built-in controlgear	N
- (9.5)	Earthing via independent controlgear	N
- (9.5.1)	Earth connection to other equipment	N
in The	Looping or through connection, conductor min. 1,5 mm² and of copper or equivalent	N
on.	Protective earthing wires in line with 5.3.1.1 and clause 7	N
- (9.5.2)	Earthing of the lamp compartments powered via the independent lamp controlgear	N
nitek vini	Test with a current of 25 A between input and output earth terminals; measured resistance (Ω) between earthing terminal and each of the accessible metal parts at \geq 10 A according 7.2.3 of IEC 60598-1: $<$ 0,5 Ω	N S
+ Jet	Output earthing terminal marked as in 7.1 t) of IEC 61347-1	N



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EN 61347-2-11					
Clause	Requirement + Test	40	Result - Remark	Verdict	

11 (11)	MOISTURE RESISTANCE AND INSULATION After storage 48 h at 91-95% relative humidity and 20-30 °C measuring of insulation resistance with d.c. 500 V ($M\Omega$):		JE P
NETER ANDE			P
	For basic insulation \geq 2 M Ω	100 ΜΩ	P P
. Also	For double or reinforced insulation $\geq 4~\text{M}\Omega$	- alter with white wh	N
Whitek w	Between primary and secondary circuits in controlgear providing SELV, values in Annex L in IEC 61347-1	BLIEF MILIEF MALIEF MALIE	N.

12 (12)	ELECTRIC STRENGTH	The ALL Bay
- (12)	Immediately after clause 11 electric strength test for 1 min	WALTER WAY
y di	Basic insulation for SELV, test voltage 500 V	P.O
The	Working voltage ≤ 50 V, test voltage 500 V	N N
, d. F	Working voltage > 50 V ≤ 1000 V, test voltage (V):	of N
Mr. W	Basic insulation, 2U + 1000 V	N
TER ST	Supplementary insulation, 2U + 1000 V	N
1	Double or reinforced insulation, 4U + 2000 V	N
The Wile	No flashover or breakdown	N.
LUNITER .	Solid or thin sheet insulation for double or reinforced insulation fulfil the requirements in Annex N in IEC 61347-1	N N

14 (14)	FAULT CONDITIONS		Р
- (14)	When operated under fault conditions the controlgear:		P
a m	- does not emit flames or molten material	The world with	M. b.
et set	- does not produce flammable gases	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	P.
NI CH	- protection against accidental contact not impaired	where the the	Р
all all	Thermally protected controlgear does not exceed the marked temperature value	Dries Murr Aut Au	s N
ANTER WATER	Fault conditions: capacitors, resistors or inductors without proof of compliance with relevant specifications have been short-circuited or disconnected	(see appended table)	ori Por
- (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)	THE WATER

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EN 61347-2-11					. A
Clause	Requirement + Test	4	Result - Remark	Verdi	ct

	Creepage distances on printed boards less than specified in clause 16 in Part 1 provided with coating according to IEC 60664-3	outer white white white	N
- (14.2)	Short-circuit or interruption of semiconductor devices	(see appended table)	Р
- (14.3)	Short-circuit across insulation consisting of lacquer, enamel or textile	(see appended table)	N
- (14.4)	Short-circuit across electrolytic capacitors	(see appended table)	Р
- (14.5)	After the tests has been carried out on three samples:		Р
iers and	The insulation resistance \geq 1 M Ω	100 ΜΩ	Р
at d	No flammable gases		Ø P
2hr.	No accessible parts have become live	Control of the contro	Р
AUTER.	During the tests, a five-layer tissue paper, where the test specimen is wrapped, does not ignite	THE METER WILLIAM SHE	ETT P
- (14.6)	Relevant fault condition tests with high-power supply	THE SHE STEE WAS	EK WILLEY

15 (15)	CONSTRUCTION	P
- (15.1)	Wood, cotton, silk, paper and similar fibrous material	↓ P
The T	Wood, cotton, silk, paper and similar fibrous material not used as insulation	multi multiple P
- (15.2)	Printed circuits	THE STIP STIP OF P
Jet a	Printed circuits used as internal connections complies with clause 14	P
- (15.3)	Plugs and socket-outlets used in SELV or ELV circuits	N
lifer whi ek nifek	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 ₁
SEP.	Plugs and socket-outlets for SELV comply with IEC 60906-3 and IEC 60884-2-4	N ₊
niter wit	Plugs and socket-outlets for SELV \leq 3 A, \leq 25 V r.m.s. or \leq 60 V d.c. and \leq 72 W comply with IEC 60906-3 and IEC 60884-2-4 or:	
TEK WITE	- plugs not able to enter socket-outlets of other standardised system	J. N
t stat	- socket-outlets not admit plugs of other standardised system	N
A, .	- socket-outlets without protective earth	Programme N



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EN 61347-2-11					
Clause	Requirement + Test	40	Result - Remark	Verdict	

16 (16) - (16)	CREEPAGE DISTANCES AND CLEARANCES		
	Creepage distances and clearances according to Table 3 and 4, as appropriate	(see appended table)	Р
IER WILTER	Controlgears providing SELV comply with L.1 in Annex L	- Militer Mariet Mairie Mair	N
The state of	Insulating lining of metallic enclosures	A B B S	N
The Paris	Basic insulation on printed boards tested according to clause 14	Mary Mary Mary All	Р
TEK VILE	Distances subjected to both sinusoidal voltage as non-sinusoidal pulses not less than value in either Table 3 or 4	of the set with the	Р
# 518#	Creepage distances not less than minimum clearance	and the top the	Р

17 (17)	SCREWS, CURRENT-CARRYING PARTS AND CONNECTIONS			
All A	Screws, current-carrying parts and connections in compliance with IEC 60598-1 (clause numbers between parentheses refer to IEC 60598-1)			
(4.11)	Electrical connections			
(4.11.1)	Contact pressure	the set of	Р	
(4.11.2)	Screws:	with the the the	N	
500	- self-tapping screws	at all all all	N	
4, 4	- thread-cutting screws	They say say the	N	
(4.11.3)	Screw locking:			
	- spring washer	is the the	N	
eter andre	- rivets	or cert cert with a	N	
(4.11.4)	Material of current-carrying parts	24, 24, 24, 2	Р	
(4.11.5)	No contact to wood or mounting surface	THE STEE WITE SHIT	Р	
(4.11.6)	Electro-mechanical contact systems	20, 20, 2	N	
(4.12)	Mechanical connections and glands	THE WIFE WITE MINIS	s N	
(4.12.1)	Screws not made of soft metal		N	
he me	Screws of insulating material	ITER WITE WALL ON	N	
di di	Torque test: torque (Nm); part:	The state of the	N	
44.	Torque test: torque (Nm); part:	- Mrs. Mrs. Mrs. Mrs.	N	
+ 50	Torque test: torque (Nm); part:	it it it it	N	
(4.12.2)	Screws with diameter < 3 mm screwed into metal	with the the	N	



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

(4.12.4)	Locked connections:		
set st	- fixed arms; torque (Nm):	N	
e m	- lampholder; torque (Nm):	N	
et set	- push-button switches; torque 0,8 Nm:	N N	
(4.12.5)	Screwed glands; force (Nm):	N	

18 (18)	RESISTANCE TO HEAT, FIRE AND TRACKING	MUTTER SHOW MAY SHOW	Р
- (18.1)	Ball-pressure test:	at the test the	Р
n. 2.	- part tested; temperature (°C):	PCB, 125°C	Р
- (18.2)	Test of printed boards:	of the test with the	Р
	- part tested:	PCB	Р
- (18.3)	Glow-wire test (650°C):	- the state at a spirit	N
	- part tested	The state of the	N-
- (18.4)	Needle flame test (10 s):		P
de d	- part tested	PCB	Р
in the	- part tested	The same of	N
- (18.5)	Tracking test:		N
74/2	- part tested	- with the the the	N
- CEN	- part tested:	- 2 2 1 1 1	N

19 (19)	RESISTANCE TO CORROSION			
21, -12,	- test according 4.18.1 of IEC 60598-1	Will as of the same and	N	
LIFE MIT	- adequate varnish on the outer surface	at the site site as a	N	

20 (-)	ANNEXES	+ Ith Ith alth acti	Р
	Comply with appropriate annexes of IEC 61347-1	(see Annexes)	Р

14	TABLE: tests of fault conditions	Р
Part	Simulated fault	Hazard
D2	Test voltage: 5Vdc, Short circuit: unit shut down, recoverable	No
D5	Test voltage: 5Vdc, Short circuit: unit shut down, recoverable	No
Q1	Test voltage: 5Vdc, Short circuit: unit shut down, recoverable	No

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71		EN 61347-2-11	rie Mri Mri Mi	30, 34
Clause	Requirement + Test	4	Result - Remark	Verdict

Q2	Test voltage: 5Vdc, Short circuit: unit shut down, recoverable	No
Q3	Test voltage: 5Vdc, Short circuit: unit shut down, recoverable	No
U1	Test voltage: 5Vdc, Short circuit: unit shut down, recoverable	No
U5	Test voltage: 5Vdc, Short circuit: unit shut down, recoverable	No
U6	Test voltage: 5Vdc, Short circuit: unit shut down, recoverable	No a
U7	Test voltage: 5Vdc, Short circuit: unit shut down, recoverable	No
U8	Test voltage: 5Vdc, Short circuit: unit shut down, recoverable	No
U9	Test voltage: 5Vdc, Short circuit: unit shut down, recoverable	No
E-cap	Test voltage: 5Vdc, Short circuit: unit shut down, recoverable	No

16 (16)	TABLE:	clearance a	nd creepage o	distance mea	asurements (m	nm)	P
	at all	Applic	able part of IE	C 61347-1 T	able 7 – 11*		
Distances	Insulation	Measured	Requ	uired	Measured	Required	
	type **	clearance	clearance	*Table	creepage	creepage	*Table
anes and	10,	$n_{\nu} = 2n_{\nu}$		et Let	Jet Jite	WILE WILL	141.00
Working vol	tage (V)					- J.	·—
Frequency i	f applicable (kHz)			Charles of	Ville Over	2 to - 5
PTI				A	: < 600 □	≥ 600 □	.e -
Peak value	of the workin	g voltage Û _{ou}	t if applicable (kV)	- INCIDE WATER	e and a	40
Pulse voltag	ge if applicabl	le (kV)			: ,	t get o	(6) ¹
Supplement	ary information	on: Max. 7.4V	DC input	TO STOR	WALL WHEN	They my	27,

^{**} Insulation type: B - Basic; S - Supplementary; R - Reinforced

A	ANNEX A, TEST TO ESTABLISH WHETHER A CONDUCTIVE PART IS A LIVE PART WHICH MAY CAUSE AN ELECTRIC SHOCK			
A.1	Comply with A.2 or A.3	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	No-	
A.2	Voltage ≤ 35 V peak or ≤ 60 V d.c:	THE MALE WALL WALL	N	

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Comply with Annex G of IEC 60598-1

- 24	EN 61347-2-11		
Clause	Requirement + Test	Result - Remark	Verdict
A.3	If voltage > 35 V r.m.s. or > 60 V d.c. or protective impendance device;	THE MILITE MILITER	un N
	touch current does not exceed 0,7 mA (peak)	. Et . JET NJET IN	TER SUPERENCE

C	ANNEX C – PARTICULAR REQUIREMENTS FOR ELECTRONIC LAMP CONTROLGEAR WITH MEANS OF PROTECTION AGAINST OVERHEATING	TE N
C3	GENERAL REQUIREMENTS	N
C3.1	Thermal protection means integral with the controlgear, protected against mechanical damage	N 35 St
t set	Renewable only by means of a tool	N
WAL.	If function depending on polarity, for cord- connected equipment protection means in both leads	N et
14. 20	Thermal links comply with IEC 60691	N
5° 5	Electrical controls comply with IEC 60730-2-3	N
C3.2	No risk of fire by breaking (clause C7)	N
C5	CLASSIFICATION	N
20	a) automatic resetting type	N
55	b) manual resetting type	N
4, ,	c) non-renewable, non-resetting type	N
J. J.	d) renewable, non-resetting type	N
Top to	e) other type of thermal protection; description :	N
C6	MARKING	N
C6.1	Symbol for temperature declared thermally protected ballasts	e⊁ N
C6.2	Declaration of the type of protection provided	N
C7	LIMITATION OF HEATING	N
C7.1	Preselection test	N
Vizies MVR	Test sample placed for at least 12 h in an oven having temperature ($t_{\rm c}$ - 5) K	N
the the	No operation of the protection device	N
C7.2	Functioning of protection means	N
while.	Normal operation of the sample in a test enclosure according to Annex D at an ambient temperature such that (t _c +0; -5) °C is obtained	N

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, h,	2 A B 1	EN 61347-2-11	With Mure Mar Mar	-24
Clause	Requirement + Test	411	Result - Remark	Verdict

Mrs. M	No operation of the protection device	N
LITER AND	Introducing of the most onerous test condition determined during test of clause 14	N
EK WILLER	Output of windings connected to the mains supply short-circuited, and other part of the controlgear operated under normal conditions	N
JALTEK V	Increasing of the current through the windings continuously until operation of the protection means	- N
INLIEK WI	Continuous measuring of the highest surface temperature	N
TEK MILT	Controlgear according to C5 a) or C5 e) operated until stable conditions are achieved	N
t The	Automatic-resetting thermal protectors working 3 times	N
70,	Controlgear according to C5 b) working 6 times	N
NATER OF	Controlgear according to C5 c) and C5) d) working once	N
NATES AND	Highest temperature does not exceed the marked value	N
the St	Any overshoot of 10% over the marked value within 15 min	N
D The state of the	ANNEX D – REQUIREMENTS FOR CARRY OUT THE HEATING TESTS OF THERMALLY PROTECTED LAMP CONTROLGEAR	N
de.	Tests in C7 performed in accordance with Annex D, if applicable	₹,N

E	ANNEX E – USE OF CONSTANT S OTHER THAN 4500 IN tw TESTS	N
LIER WALLER	Comply with tests according Annex E, if applicable	N C

F JIM	ANNEX F - DRAUGHT-PROOF ENCLOSURE	an P
y MITEN	Draught-proof enclosure in accordance with the description	NUTER WITE WHILE
	Dimensions of the enclosure	Р
aro a	Other design; description	The Man

H J	ANNEX H - TESTS	and and P
ist writer	All tests performed in accordance with the advise given in Annex H, if applicable	LIET WITE WILLES



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	EN 61347-2	2-11	
Clause	Requirement + Test	Result - Remark	Verdict
7	at the the atternation with	mer and my an an	1
Here wi	ANNEX I - PARTICULAR ADDITIONAL INDEPENDENT SELV D.C. OR A.C. SU CONTROLGEAR FOR LED MODULES		N
. 7/	Requirements not applicable to the evaluation	ated product	_4,
L shrift	ANNEX L: PARTICULAR ADDITIONAL F CONTROLGEARS PROVIDING SELV (IE		N
This is	Requirements not applicable to the evalua-	ated product	311/2
M. Tet July	ANNEX M: DIELECTRIC STRENGTH TE INTENDED FOR USE IN IMPULSE WITH		N
TER BANTLE	Comply with tests according Annex M, if applicable	IET TITTE WITTER WITTER WAS	N
N	ANNEX N: REQUIREMENTS FOR INSUL DOUBLE OR REINFORCED INSULATIO		N
SINGLE SI	Requirements not applicable to the evalua-	ated product	Intile .
O EST ANDS	ANNEX O: ADDITIONAL REQUIREMENT CONTROLGEAR WITH DOUBLE OR RE (IEC 61347-1)		N
3/1	Requirements not applicable to the eva	luated product	-20

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Clause	Requirement + Test	Result - Remark	Verdic
Olduse	requirement root	Troduc Tromanc	Voluio
ANNEX 7	LED modules for general lighting – Safety specifiEN IEC 62031:2020	ications	ITE NEED
4	GENERAL REQUIREMENTS	LE INCTES MALICISMAN	P
4.4	Integral modules treated as part of luminaires defined in clause 0.5 of IEC 60598-1	a ret stre street	MALTE WALT
4.5	Independent modules complies with requirements in IEC 60598-1	10 10 10 10 10 10 10 10 10 10 10 10 10 1	NI NI
	the state of the state of the state of	ales are are	
5	GENERAL TEST REQUIREMENTS	the set of the set	
5.5	SELV-operated LED modules comply with Annex I of IEC 61347-2-13	(see Annex 1)	N
. an	General conditions for tests in Annex A	(see Annex A)	N,
# 55th	THE WALL WILL MAY THE	t the telegraphy	35th 35th
6	CLASSIFICATION	mer are an	a. a.—
CLIFE OF	Built-in module:	Yes ☐ No ☒	STEEL WITE
	Independent module:	Yes ☐ No ⊠	
Neither SINE	Integral module:	Yes ⊠ No □	
ret mired	For Integral module; Note to 1.2.1 in IEC 60598-1 applies.		
7	MARKING	The the the	N
_,	Requirements not applicable to the evaluated produc	ct.	-
n15 - 11	the state of the s	ret set ster ster w	Tek Trick
8	TERMINALS	and the same of	N
The States	Screw terminals according section 14 of IEC 60598-1	CON STORY STATE SOLIT	N
4 4	Separately approved; component list	(see Annex 2)	N
2100	Part of the luminaire	(see Annex 3)	N
A	Screwless terminals according section 15 of IEC 6059	98-1:	N-
The s	Separately approved; component list	(see Annex 2)	N
Set S	Part of the luminaire	(see Annex 4)	√ N
16. 20.	Connectors according IEC 60838-2-2:	very more authorized	N
TER STATE	Separately approved; component list	(see Annex 2)	N
0 (0)	DROVICION FOR PROTECTIVE FARTURE	Au. Au. Au.	7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
9 (9)	PROVISION FOR PROTECTIVE EARTHING		N

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Requirements not applicable to the evaluated product.



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i. n.	a state of	IEC 62031	With Will Mile Must	All All
Clause	Requirement + Test	70	Result - Remark	Verdict

10 (10)	PROTECTION AGAINST ACCIDENTAL CONTACT WITH LIVE PARTS	N S
Tet S	Requirements not applicable to the evaluated product.	5 ⁶ - 3

11 (11)	MOISTURE RESISTANCE AND INSULATION	d	P
· (5 E)	After storage 48 h at 91-95% relative humidity and 20-30 °C measuring of insulation resistance with d.c. 500 V (M Ω):		Р
27,	For basic insulation $\geq 2 \ M\Omega$:	100ΜΩ	Р
alfelt u	For double or reinforced insulation \geq 4 M Ω :	A THE THE STATE	N
LTEN SIGN	Between primary and secondary circuits in controlgear providing SELV, values in Annex L in IEC 61347-1		P SEM SMI

12 (12)	ELECTRIC STRENGTH	WILL MULL MULL MULL	₹P
NATER V	Immediately after clause 11 electric strength test for 1 min	THE STATE STATES SPATES	P
	Basic insulation for SELV, test voltage 500 V		Р
no su	Working voltage ≤ 50 V, test voltage 500 V	The same of	N
ar s	Working voltage > 50 V ≤ 1000 V, test voltage (V):		N
71/2	Basic insulation, 2U + 1000 V	allier also the also	N
t Car	Supplementary insulation, 2U + 1000 V	a a de de	N
71,.	Double or reinforced insulation, 4U + 2000 V	MUTTER MUTE MUTE MAY	N
NI CT	No flashover or breakdown	at all sat water	Р
sir v	Solid or thin sheet insulation for double or reinforced insulation fulfil the requirements in Annex N in IEC 61347-1		N

13 (14)	FAULT CONDITIONS	P
- (14)	When operated under fault conditions the controlgear:	P P
The !	- does not emit flames or molten material	n P
200	- does not produce flammable gases	A A CP
n - 11	- protection against accidental contact not impaired	P
TEK WALT	Thermally protected controlgear does not exceed the marked temperature value	et military et N. C.
# WALTER WALTER	Fault conditions: capacitors, resistors or inductors without proof of compliance with relevant specifications have been short-circuited or disconnected	antiet mite unit

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	IEC 62031		
Clause	Requirement + Test	Result - Remark	Verdic
- (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)	tret writer writer	F INCN
er an	Creepage distances on printed boards less than specified in clause 16 in Part 1 provided with coating according to IEC 60664-3	ex unite unite unite	N I
- (14.2)	Short-circuit or interruption of semiconductor devices	LED	Р
- (14.3)	Short-circuit across insulation consisting of lacquer, enamel or textile	(see appended table)	J.N
- (14.4)	Short-circuit across electrolytic capacitors	(see appended table)	N
- (14.5)	After the tests has been carried out on three samples:		Р
it Med	The insulation resistance \geq 1 M Ω :	100 ΜΩ	P
e st	No flammable gases	211 111	P
The	No accessible parts have become live	RETER METER MATER WAS	Р
STATES A	During the tests, a five-layer tissue paper, where the test specimen is wrapped, does not ignite	tet stet stet stet	P
- (14.6)	Relevant fault condition tests with high-power supply		-05
13.2	Module withstands overpower condition >15 min.	GE STATE MALL	ed Pari
TEX UNITE	Module with automatic protective device or power limiter, test performed 15 min. at limit.	The state of	N N
E CENT	During the tests, tissue paper, spread below module, does not ignite	the set of the	Р

15	CONSTRUCTION	TIER NITER NITE ON
s.	Wood, cotton, silk, paper and similar fibrous material not used as insulation	P

16	CREEPAGE DISTANCES AND CLEARANCES	LT P.
4.	Creepage and distances and clearances in compliance with IEC 60598-1	Р

17 (17)	SCREWS, CURRENT-CARRYING PARTS AND CONNECTIONS	
Marian Mari	Screws, current-carrying parts and connections in compliance with IEC 60598-1 (clause numbers between parentheses refer to IEC 60598-1)	P

18 (18)	RESISTANCE TO HEAT, FIRE AND TRACKING	N
I WILLS	Resistance to Heat, Fire and Tracking in compliance with IEC 61347-1 (clause numbers between parentheses refer to IEC 61347-1)	N

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IEC 62031			
Clause	Requirement + Test	Result - Remark	Verdict
4.	and the state of t	74. 74. 74.	20 J
(18.1)	Ball-pressure test:	a state	N
21, 2,	- part tested; temperature (°C)	Mary Mary Mary 1	N
(18.2)	Test of printed boards	at the set is	S N
	- part tested:	he The An An An	N
(18.3)	Glow-wire test (650°C):	at all all self	N
	- part tested	1/1	N
(18.4)	Needle flame test (10 s):	t crest screet miles	, N
24	- part tested	-11 4	L N
(18.5)	Tracking test:	ALTER BLICK MALER OF	N
	- part tested:	20 70 1	A N

19 (19)	RESISTANCE TO CORROSION	N.
-1/4	Rust protection:	THE THE THE THE
- 5E	- test according 4.18.1 of IEC 60598-1	A A SIT SIT
20, 3	- adequate varnish on the outer surface	N N

20	INFORMATION FOR LUMINAIRE DESIGN	N
THE METER	Information in Annex D	ar Life

21	HEAT MANAGEMENT	N N
21.1	General	N
mes 1	Exchangeability is safeguarded by cap or base	ST SINT IN S
21.2	Heat-conducting foil and paste	A A N
	Heat-conducting foil delivered with the module if necessary	N N
21.4	Construction	and and a
NLTEH	Electrical connection and mechanical holding are separate	Stat stat Miles

22	Photobiological safety	P
22.1	UV radiation	N
22.2	Blue light hazard	Р
+ 4	RG at 200 mm according to IEC/TR 62778	P
22.3	Infrared radiation	N



N

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Clause	Reguirement + Test Result - Remark			
Α 🦑	ANNEX A - TESTS		P	
the th	All tests performed in accordance with the advice given in Annex H of IEC 61347-1, if applicable			

SELV-operated LED modules in compliance with Annex I of IEC 61347-2-13

WALTEK

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447	2, 4	1 1	EN 62471	itie white mer mer	20 20
Clause	Requirement -	+ Test	All A	Result - Remark	Verdic
Annex 8	Retinal blue lig	ht hazard Of	Lamps And Lamp S	ystems IEC/TR 62778:2014	e ^t P
34 X	TABLE: Spec	troradiometr	ic measurement	The The The A	Р
New Whitest	Measurement	t performed o	☐ LED package ☐ LED module ☐ Lamp ☑ Luminaire	.aniwi	
COLUMN TO	Model number	er	MO9675	J. J.	
	Test voltage	(V)	5V	y zet	
there are	Test current ((mA)		TIPE INTE MILL WALL WALL	aller is
10 S	Test frequence	cy (Hz)	:	·- · · · · · · · · · · · ·	10th
in the	Ambient, t (°C)	25.3	410, -74	
ex whitek	Measuremen	t distance	::	☑ 20 cm ☐ cm	In The Wille
WATER AN	Source size .		:: ::	Non-small □ Small : mm	Net Warren
Miles Hair	Field of view		☐ 100 mrad ☐ 11 mrad ☐ 1,7 mrad (for small sources)	garai al garaial garaia	
	Item	Symbol	Units	Result	Remark
Correlated colour temperature		ССТ	K of and	/ Inster white white ou	a maria
x/y colour c	oordinates	7.0		1 1 10 10 10	
Blue light ha	azard radiance	L _B	W/(m ² •sr ¹)	4.548e+000	
Blue light hazard irradiance E _B W/m ²			W/m ²	Let yet yet with	mire mi
Luminance	15 15	St S	4.629e+003	\	
Illuminance	Mrs. Mrs.	Par E can	J. lx	of 1 the still solder	n gr g nc
Lamp class	ification group: R0	30	2h 2h, 7	st 15	



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	2 1 1 1 D	EN 62471	mer and me and	
Clause	Requirement + Test	40.	Result - Remark	Verdict

Annex 9	Photobiological safety	at the left cler	P

	Action	in the second	S 500	Emission Measurement					
Risk	spectru	Symbol	Units	Exe	mpt	Low	risk	Mod	risk
	m	4 0	1	Limit	Result	Limit	Result	Limit	Result
Actinic UV	S _{UV} (λ)	Es	W⋅m ⁻²	0.001	6.1e-08	0.003	į.	(B) - (B)	1,100
Near UV		E _{uvA}	W⋅m ⁻²	0.33	6.9e-04	33	n m	2/	3
Blue light	Β(λ)	L _B	W·m ⁻² ·sr ⁻	100	6.1e+00	10000	elik - sith	4000000	and the
Bluelight, small source	Β(λ)	É _B	W·m⁻²	0.01*	AUS A	1.0	e - Test	400	zek _{un} i
Retinal thermal	R(λ)	L _R	W·m ⁻² ·sr ⁻	28000/α	7.3e+01	28000/α	Total Control	71000/α	
Retinal thermal,	ETEL RET	* WILLER	W⋅m ⁻² ⋅sr	545000 0.0017≤ α≤0.011	i unes	VIAL.	riege er enes en	ER WEEK	entres
weak visual stimulus**	R(λ)	L _{IR}	1 200	6000/α 0.011≤α ≤0.1	7164 7164	ight day	Juli 12	Whitek W	ALTER OF
IR radiation, eye	an a	E _{IR}	W∙m ⁻²	100	4.1e-03	570	The state of	3200	TELE SULL
	urce defined evaluation o		α<0.011 rad ource.	ian. Averagi	ing field of v	iew at 10000	s is 0.1 rad	lian.	MILTER

Lamp classification group..... exempt⊠ risk 1☐ risk 2☐ risk 3☐

and the state of t

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	EN 62493	in the the said					
Clause	Requirement + Test	Result - Remark	Verdict				
ANNEX 10	Assessment Of Lighting Equipment Related To Electromagnetic Fields according to standard		Р				
4	LIMITS	THE STATE SHOWER SHOWER THE SHOWER	Р				
4.1	General	a state of the	P				
MULITER AN	Comply with Van der Hoofden test limit in 4.2.3 or inherently compliant in 4.2.2 and pass assessment procedure for intentional radiators in 4.3	A MILITER MALTER MALTER	Р				
4.2	Unintentional radiating part of lighting equipm	ent of the state states	Р				
4.2.2	Lighting equipment deemed to comply with the Va	an der Hoofden test without testing	Р				
etill anetill	1) electronic controlgear	Yes No	400				
+ +	2) incandescent-lamp technology	Yes No	4 CV				
mr.	3) LED-light-source technology	Yes ⊠ No □	21/2				
e di	4) OLED-light-source technology	Yes No					
1112 A	5) high-pressure discharge lamp LED-light-source technologies	Yes No	. T Z				
lury Aug	6) low-pressure discharge lamp technologies with exposure distance ≥ 50 cm	Yes No	* _n				
Ser Wille	7) independent auxiliary	Yes No	- L-C				
e st	Not fulfil any of 1-7 above subject to 4.2.3						
4.2.3	Applications of limits						
antiek ani	Not fulfil any of 1-7 in 4.2.2 but the compliance factor F is ≤ 1	tet stet stet statet	N SI				
4.3	Intentional radiating part of lighting equipment						
STE VIRE	Comply with one of methods in Clause 7 if intentional radiator	Wiley Myries Muries Murit, M.	N				
6	MEASUREMENT PROCEDURE FOR THE VAN D	DER HOOFDEN TEST	N				
6.1	General						
all all	Measurements carried out under conditions according Clause 6.1 – 6.6	See Table 6	N				
7	ASSESSMENT PROCEDURE INTENTIONAL RAI	DIATORS	N				
7.2	Low-power exclusion method						
7.2.1	Input P _{int,rad}		N				
11.	Exclusion level P_{max}		3110				



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	EN 62493				
Clause	Requirement + Test Result - Remark		Verdict		
30	Input power $P_{\text{int,rad}}$ < exclusion level P_{max}	at at at	SOF SN		
7.3	Application of the EMF product standard for body worn-equipment				
Notes and	If not Clause 7.2 is met and expose distance ≤ 0.05 m, comply with IEC 62209-2	NATES WHITES WALTER WAL	N		
7.4	Application of the EMF product standard for base stations				
- Get	If not Clause 7.2 is met and if intentional radiator is base station, comply with IEC 62232	The Aug Au	N_		
7.5	Application of another EMF standard				
Marier W	If not Clause 7.2 is met and if intentional radiator cannot be considered as in Clause 7.3 or 7.4, comply with IEC 62311	MATTER WATER WATER WA	S N		

6	TABLE: Me	TABLE: Measurement results with Van der Hoofden test head						
Location of EUT		Test model	Measuring distance	Result(F)	Limit(F)	Verdict		
Reference EN 62493	e Annex B of 3:2015	aver the the	- 55 th 55th	TEK MITEK	≤1.0	N N		

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

W

Photo Documentation

Model: MO9675

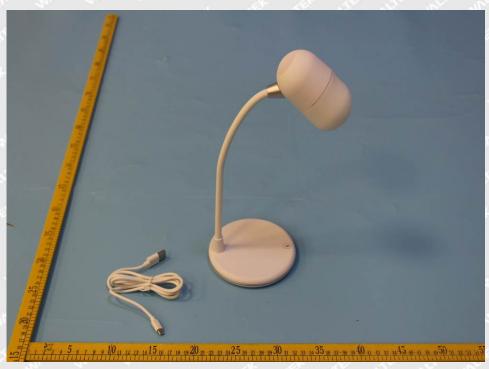


Photo 1

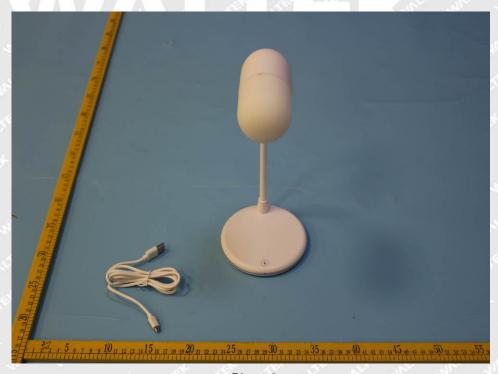


Photo 2

W



Photo 3



Photo 4



Photo 5

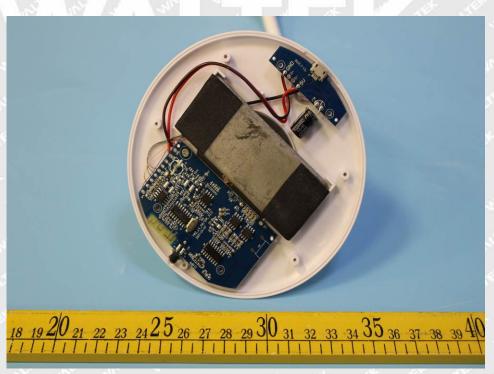


Photo 6

W

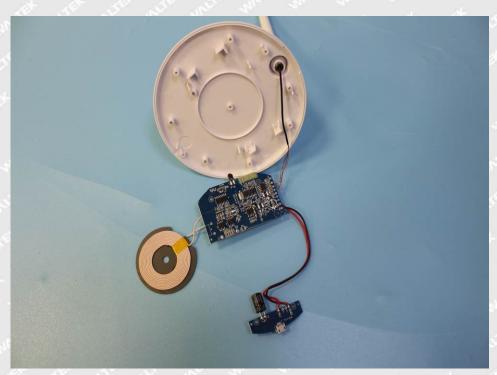


Photo 7

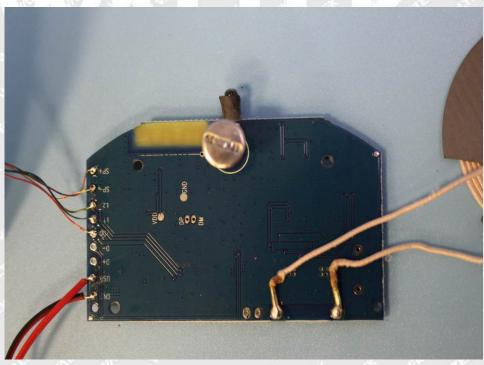


Photo 8

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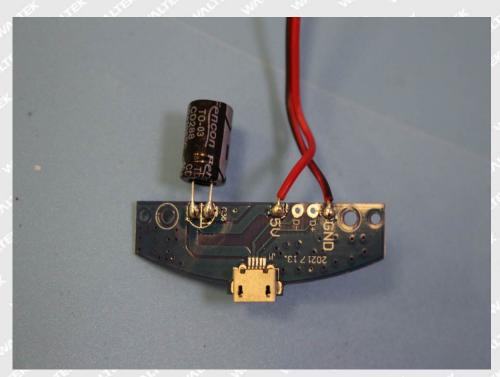


Photo 9

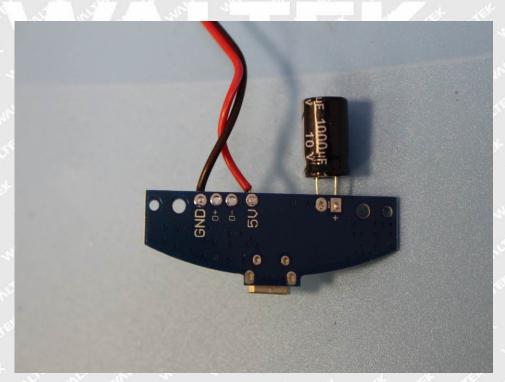


Photo 10

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Photo Documentation



Photo 11



Photo 12

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