



# Test Report

On Behalf of  
**LIGHTEARTH (China),Ltd**  
**UV sterilizer**

**Model :** LS-UV14W,LS-UV10W,LS-UV17W,LS-UV21W,LS-UV28W,LS-UV40W,  
LS-UV80W,LS-UV120W,LS-U160W,LS-UV200W,LS-UV240W,  
LS-UV320W,LS-UV360W,LS-UV480W,LS-UV600W,LS-UV720W,  
LS-UV960W,LS-UV1050W,LS-UV1200W,LS-UV1800W,LS-UV2400W,  
LS-UV3600W,LS-UV4800W,LS-UV6000W

**Prepared for :** **LIGHTEARTH (China),Ltd**  
Xin'an Industrial Zone, Danzao Town, Nanhai District, Foshan City,  
Guangdong Province, China

**Prepared By :** **TMC Testing Services (Shenzhen) Co., Ltd.**  
1st Floor, Block A1, Zone A, Xinshidai Gongrong Industrial Park, No. 2,  
Shihuan Road, Shiyan Street, Baoan District, Shenzhen, China  
Tel: +86-755- 86642861  
Web: www.tmc-lab.com  
E-mail: Cert@tmc-lab.com

# TEST REPORT

EN 61199:2011 + A1:2013 + A2:2015  
**Single-capped fluorescent lamps - Safety specifications**

Report Number.....: TMC210816108-S

Date of issue.....: August 25, 2021

Total number of pages.....: 22 pages

Name of Testing Laboratory  
preparing the Report.....: TMC Testing Services (Shenzhen) Co., Ltd.

Applicant's name.....: LIGHTEARTH (China),Ltd

Address.....: Xin'an Industrial Zone, Danzao Town, Nanhai District, Foshan City,  
Guangdong Province, China

**Test specification:**

Standard.....: EN 61199:2011 + A1:2013 + A2:2015  
EN 62493:2015

Test procedure.....: Type Test

Non-standard test method.....: N/A

Test Report Form No.....: IEC\_61199

Test Report Form(s) Originator.....: Intertek Semko AB

Master TRF.....: Dated 2018-06-09

**Copyright © 2020 IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (IECEE System). All rights reserved.**

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

If this Test Report Form is used by non-IECEE members, the IECEE/IEC logo and the reference to the CB Scheme procedure shall be removed.

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

**General disclaimer:**

The test results presented in this report relate only to the object tested.

This report shall not be reproduced, except in full, without the written approval of the Issuing CB Testing Laboratory. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.

<b>Test item description</b> .....:	UV sterilizer	
<b>Trade Mark(s)</b> .....:	LIGHTEARTH	
<b>Manufacturer</b> .....:	LIGHTEARTH (China).,Ltd	
<b>Model/Type reference</b> .....:	LS-UV14W,LS-UV10W,LS-UV17W,LS-UV21W,LS-UV28W, LS-UV40W,LS-UV80W,LS-UV120W,LS-U160W,LS-UV200W, LS-UV240W,LS-UV320W,LS-UV360W,LS-UV480W, LS-UV600W,LS-UV720W,LS-UV960W,LS-UV1050W, LS-UV1200W,LS-UV1800W,LS-UV2400W,LS-UV3600W, LS-UV4800W,LS-UV6000W	
<b>Ratings</b> .....:	230V~ 50/60Hz 14W	
<input checked="" type="checkbox"/> <b>Testing Laboratory:</b>		
<b>Testing location/ address</b> .....:	TMC Testing Services (Shenzhen) Co., Ltd. 1st Floor, Block A1, Zone A, Xinshidai Gongrong Industrial Park, No. 2, Shihuan Road, Shiyuan Street, Baoan District, Shenzhen, China	
<b>Tested by (name, function, signature)</b> .....:	Seven Liu	 
<b>Approved by (name, function, signature)</b> ...:	Bart Deng	
<b>List of Attachments (including a total number of pages in each attachment):</b> Attachment No. 1: 2 pages of photo documentation.		
<b>Summary of testing:</b>		
<b>Tests performed (name of test and test clause):</b> IEC 61199:2011 + A1:2012 + A2:2014 IEC 62349:2015	<b>Testing location:</b> TMC Testing Services (Shenzhen) Co., Ltd. 1st Floor, Block A1, Zone A, Xinshidai Gongrong Industrial Park, No. 2, Shihuan Road, Shiyuan Street, Baoan District, Shenzhen, China	

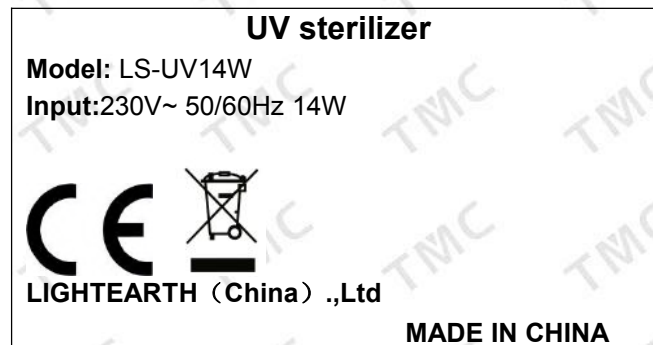
**Summary of compliance with National Differences (List of countries addressed):**

The product fulfils the requirements of Germany and European Group differences

EN 61199:2011 + A1:2013 + A2:2015

EN 62493:2015

**Copy of marking plate:**



**Remarks:**

1. Representative markings of LS-UV14W, markings of all models are identical except for the model name and rating.
2. Height of CE mark at least 5mm, height of WEEE symbol should not less than 7mm, height of other marks at least 5mm, height of letters and numerals at least 2mm.

<b>Possible test case verdicts:</b> - test case does not apply to the test object..... : N/A - test object does meet the requirement..... : P (Pass) - test object does not meet the requirement..... : F (Fail)	
<b>Testing..... :</b> <b>Date of receipt of test item..... :</b> August 16, 2021 <b>Date (s) of performance of tests..... :</b> August 16, 2021 - August 25, 2021	
<b>General remarks:</b> "(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report. <b>Throughout this report a <input checked="" type="checkbox"/> comma / <input type="checkbox"/> point is used as the decimal separator.</b>	
<b>Manufacturer's Declaration per sub-clause 4.2.5 of IEC60335-1:</b>	
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided.....	<input type="checkbox"/> <b>Yes</b> <input checked="" type="checkbox"/> <b>Not applicable</b>
<b>When differences exist; they shall be identified in the General product information section.</b>	
<b>Name and address of factory (ies)..... :</b> Same as manufacturer	
<b>General product information and other remarks:</b> - All models have similar appearance except size and power are difference. - Unless otherwise specified, the model LS-UV14W was chosen as representative model to perform all test.	

**Model list:**

No.	Model	Power	BODY SIZE
1	LS-UV10W	10W	270*51*71
2	LS-UV14W	14W	350*63*88
3	LS-UV17W	17W	360*63*88
4	LS-UV21W	21W	490*63*88
5	LS-UV28W	28W	600*63*88
6	LS-UV40W	40W	906*63*88
7	LS-UV80W	80W	920*102*280mm
8	LS-UV120W	120W	920*159*380mm
9	LS-U160W	160W	920*159*380mm
10	LS-UV200W	200W	920*159*380mm
11	LS-UV240W	240W	920*219*420mm
12	LS-UV320W	320W	920*159*380mm
13	LS-UV360W	360W	1350*159*480mm
14	LS-UV480W	480W	1350*159*480mm
15	LS-UV600W	600W	1350*219*480mm
16	LS-UV720W	720W	1350*219*480mm
17	LS-UV960W	960W	1650*219*480mm
18	LS-UV1050W	1050W	1650*219*480mm
19	LS-UV1200W	1200W	1650*273*480mm
20	LS-UV1800W	1800W	1650*273*480mm
21	LS-UV2400W	2400W	1650*325*525mm
22	LS-UV3600W	3600W	1630*400*600mm
23	LS-UV4800W	4800W	1630*550*750mm
24	LS-UV6000W	6000W	1630*650*850mm

EN 61199:2011 + A1:2013 + A2:2015			
Clause	Requirement + Test	Result - Remark	Verdict

<b>2.1</b>	<b>General</b>		<b>P</b>
	Lamps shall be so designed and constructed that in normal use they present no danger to the user or the surroundings.		P

<b>4.2</b>	<b>Marking</b>		<b>P</b>
4.2.1	Legibly and durably marked on the lamps		P
	mark of origin (this may take the form of a trade mark, the manufacturer's name or the name of the responsible vendor)	See rating label	P
	The nominal wattage (marked "W" or "watts") or any other indication which identifies the lamp.	See rating label	P
4.2.2	a) Presence and legibility of the marking by visual inspection		P
	b) Rubbing test		P
	Rubbed by hand with a smooth cloth damped with water for a period of 15 s		P
	The marking shall still be legible		P

<b>4.3</b>	<b>Mechanical requirements for caps</b>		<b>P</b>
4.3.1	Caps shall be so constructed and assembled to the tube(s) that they remain intact and attached during and after operation. Comply with the following tests:		P
A.1	GR8, G10q, GR10q, GU10q, GZ10q and 2GX13 caps		—
A.1.1	For unused lamps		P
	A pull is exerted between the parts of the cap identified as conceivable to pull apart for 1 min without a jerk.		P
	GR8, G10q, GR10q GU10q and GZ10q..... 80 N:		P
	2GX13..... 40 N:		N
	At the end of the test, the cap is safe and does not exhibit any opening of seams or the like such that a jointed test finger as described in IEC 60529 can be inserted to touch live parts.		P

EN 61199:2011 + A1:2013 + A2:2015			
Clause	Requirement + Test	Result - Remark	Verdict

	Additional periodic test for lamps with G10q, GZ10q and 2GX13 caps: The cap is rotated, without difficulty, over at least an arc of $\pm 5^\circ$ about the nominal angle $\alpha$ to the plane through the lamp tube.		P
	The lead wires do not short-circuit during maximum rotation of the cap.		P
	After moving the cap to the most onerous position, a jointed test finger isn't able to be inserted to touch live parts.		P

A.1.2	For lamps after heating test		P
	Heating treatment for a period of 2000h $\pm$ 50h at a temperature corresponding to caps as below:	2000h heating treatment performed in manufacturer	P
	G10q	140°C	P
	GR8	130°C	N
	GR10q; 10W	140°C	N
	GR10q; 16W, 21W, 28W, 38W	130°C	N
	GU10q	160°C	N
	GZ10q	160°C	N
	2GX13	130°C	N
	A pull is exerted between the parts of the cap identified as conceivable to pull apart for 1 min without a jerk.		P
	GR8, G10q, GR10q GU10q and GZ10q..... 80 N:		P
	2GX13..... 40 N:		N
	At the end of the test, the cap is safe and does not exhibit any opening of seams or the like such that a jointed test finger as described in IEC 60529 can be inserted to touch live parts.		P
	Additional periodic test for lamps with G10q caps: The cap is rotated, without difficulty, over at least an arc of $\pm 5^\circ$ about the nominal angle $\alpha$ to the plane through the lamp tube.		P
	The lead wires do not short-circuit during maximum rotation of the cap.		P
	After moving the cap to the most onerous position, a jointed test finger isn't able to be inserted to touch live parts.		N



EN 61199:2011 + A1:2013 + A2:2015			
Clause	Requirement + Test	Result - Remark	Verdict
A.2	2G7, 2GX7, 2G8, GX10q, GY10q, 2G10, 2G11, 2GX11, GR14q, G23, GX23, G24, GX24, GZ24 and GX32 caps		—
A.2.1	For unused lamps		P
	An axial pull of 40 N or a bending moment of 2 Nm is applied by holding in a uniform manner that part of the glass tube closest to the cap.		P
	Neither lamp bulb nor lamp cap is loosened		P
A.2.2	For lamps after heating test		P
	Heating treatment for a period of 2000h±50h at a temperature corresponding to caps as below:	2000h heating treatment performed in manufacturer	P
	2G7, 2GX7, 2G10, 2G11, 2GX11	160°C	P
	2G8	160°C	N
	GX10q, GY10q	160°C	N
	GR14q	140°C	N
	G23, GX23, G24, GX24, GX32	160°C	P
	GZ24, 42 W	160°C	N
	An axial pull of (under consideration) 40 N or a bending moment of (under consideration) 1,5 Nm is applied by holding in a uniform manner that part of the glass tube closest to the cap.		P
	Neither lamp bulb nor lamp cap is loosened		P
4.3.2	Dimensional requirements for caps		P
4.3.2.1	Caps comply with the dimensional requirements of IEC 60061-1.		P
4.3.2.2	Compliance is checked by using the gauges of IEC 60061-3		P
4.3.3	Pin connections and keying configurations		P
4.3.3.1	Pin connections		P
	The connection of lamp cathodes to the pins of caps having four pins shall conform to the requirements shown in annex E for the relevant cap.		P
4.3.3.2	Key configuration		N
	For those cap types incorporating keys which ensure non-interchangeability with similar lamp types, the caps shall conform to the cap/key version given in the relevant lamp data sheet of IEC 60901.		N

EN 61199:2011 + A1:2013 + A2:2015			
Clause	Requirement + Test	Result - Remark	Verdict

4.3.4	System requirements		N
-------	---------------------	--	---

<b>4.4</b>	<b>Insulation resistance</b>		<b>P</b>
4.4.1	The metal shell of the cap and pins) or contacts shall not be less than 2 MΩ.	100 MΩ	P
4.4.2	checked by measurement with suitable test equipment using a d.c. voltage of 500 V		P

<b>4.5</b>	<b>Electric strength</b>		<b>P</b>
4.5.2	Test voltage: 1500VAC		P
	No-flash-over or breakdown		P

<b>4.6</b>	<b>Parts which can become accidentally live</b>		<b>P</b>
4.6.1	Metal parts, if any, intended to be insulated from live parts shall not be or become live		P
4.6.2	With the exception of cap pins, no live part shall project from any part of the cap		P
4.6.3	Compliance is checked by a suitable measuring system		P

<b>4.7</b>	<b>Resistance to heat and fire</b>		<b>P</b>
4.7.1	Sufficiently resistant to heat		P
4.7.2.1	Samples are tested for a period of 168 h in a heating cabinet at a temperature as below		P
	2G7, 2GX7, 2G10, 2G11, 2GX11	160°C	P
	2G8	160°C	N
	GR8	130°C	N
	G10q	140°C	N
	GR10q; 10 W	140°C	N
	GR10q; 16, 21, 28, 38 W	130°C	N
	GU10q	160°C	N
	GX10q, GY10q	160°C	N
	GZ10q	160°C	N
	2GX13	130°C	N

EN 61199:2011 + A1:2013 + A2:2015			
Clause	Requirement + Test	Result - Remark	Verdict
	GR14q	140°C	N
	G23, GX23, G24, GX24, GX32	160°C	P
	GZ24; 42 W	160°C	N
	At the end of the test, the sample shall not have undergone any impairing their further safety,		P
	No reduction in the protection against electric shock as required in 2.4 and 2.5;		P
	No loosening of cap pins, cracks, swelling and shrinking as determined by visual inspection.		P
	The dimensions shall comply with the requirements of 2.3.2.		P
4.7.2.2	Samples are subjected to a ball-pressure test.		P
	- part tested ..... : Plastic holding pins: 125°C		P
4.7.3	Insulating material of caps shall be resistant to abnormal heat and to fire.		P
4.7.4	Parts are subjected to a test using a nickel-chromium glow-wire heated to 650°C. The test apparatus shall be that described in IEC 60695-2-1/0.		P
	No ignite a piece of tissue paper consisting of five layers, spread out horizontally 200 mm ± 5 mm below the sample		P

4.8	Creepage distance for caps		P
4.8.1	The minimum creepage distance between contact pins and the metal parts (if any) of the cap shall be in accordance with the requirements in IEC 60061-1		P
	Checked by measurement in the most onerous position.		P

4.9	Lamp cap temperature rise		P
4.9.1	Lamp cap temperature rise shall not exceed 75K		P
4.9.2	Compliance is checked by the procedure specified in annex B		P

4.10	Radio interference suppression capacitors		N
------	---	--	---

EN 61199:2011 + A1:2013 + A2:2015			
-----------------------------------	--	--	--

Clause	Requirement + Test	Result - Remark	Verdict
--------	--------------------	-----------------	---------

	Lamps which contain integral means of starting and/or contain capacitors to suppress radio interference shall have capacitors which comply with the following requirements.		—
4.10.2	Moisture resistance		N
	Humidity test 48 h		N
	After humidity treatment, the capacitor is subjected to and satisfactorily withstand a d.c. voltage of 2 000 V without breakdown for 1 min.		N
4.10.3	Resistance to flame and ignition		N
	The capacitors are each subjected to a gradually increasing a.c. voltage until breakdown occurs. Thereafter, each capacitor shall be connected in series with inductive ballast, of a rated wattage suitable for operating the relevant lamps and operated for 5 min at the rated voltage of the ballast.		—
	The capacitor does not induce flame or cause ignition.		N

<b>4.11</b>	<b>UV radiation</b>		<b>N</b>
	UV power $\leq 2$ mW/klm .....	--	N
	Reflektor lamp UV power $\leq 2$ mW/(m <sup>2</sup> ·klx) .....	--	N

<b>4.12</b>	<b>Information for luminaire design</b>		<b>N</b>
-------------	---	--	----------

<b>4.13</b>	<b>Information for ballast design</b>		<b>N</b>
-------------	---------------------------------------	--	----------

<b>4.14</b>	<b>Information for lampholder design</b>		<b>N</b>
-------------	--	--	----------

<b>3</b>	<b>Assessment</b>		<b>N</b>
----------	-------------------	--	----------

<b>ANNEX A</b>	<b>Tests for assessing caps for construction and assembly</b>		<b>P</b>
----------------	---	--	----------

<b>ANNEX B</b>	<b>Maximum lamp cap temperature rise values and method of measurement</b>		<b>P</b>
----------------	---	--	----------

B.1	The circuit used the appropriate reference ballast		P
	Particular test conditions		P

EN 61199:2011 + A1:2013 + A2:2015			
Clause	Requirement + Test	Result - Remark	Verdict
	The test lamp shall be normal production lamp		P
	The test lamp shall be suspended in low mass nylon slings with the cap pins facing vertically upwards, at 25°C±5°C		P
	The electrical connections to the lamp shall be through 1mm <sup>2</sup> ±5% copper wire		P
	The lamp shall be a normal production lamp but specially produced such that its cathodes are deactivated, i.e. without cathode emitter.		P
	The starter shall be short-circuited, i.e. the cathodes shall be operated in series.		N
	Where necessary, the surface of caps shall be suitably prepared to give good contact with the temperature measuring device (e.g. thermocouples).		P
	The test continues until a stable temperature is achieved.		P
B.2.1	2G7, 2GX7, 2G8, GX10q, GY10q, 2G10, 2G11, 2GX11, GR14q, G23, GX23, G24, GX24, GZ24 and GX32 caps		P
	The highest temperatures on the lamp cap occur close to the electrode-containing legs. Those legs have only one connection (bridge or bend) to another leg.		—
B.2.1.1.1	Lamps having electrodes in adjacent legs		N
B.2.1.1.2	Lamps having electrodes not in adjacent legs		N
B.2.2	GR8, G10q, GR10q, GU10q, GZ10q and 2GX13 caps		P
B.2.2.1	GR8 and GR10q caps (all wattages, excluding 10 W)		P
	The temperature rise shall be measured at a point on the cap surface which is equidistant between the two glass limbs which emerge from the cap, and which lies on the straight line which joins the axes of the glass limbs.		P
B.2.2.2	G10q and GR10q caps (10 W)		P
	The temperature rise shall be measured at the centre of the cap face which is opposite to that containing the cap pins.		P
B.2.2.3	2GX13 caps		N

EN 61199:2011 + A1:2013 + A2:2015			
Clause	Requirement + Test	Result - Remark	Verdict

	The temperature rise shall be calculated from the temperature measured on the centre point of the cap surface, which is equidistant from the two pairs of pins.		N
B.2.2.4	GU10q and GZ10q caps		N
	The temperature rise shall be calculated from the temperature measured at the surface of the plastic as close as the centre of four pins.		N

Table for Annex B	Limit of maximum cap temperature rise		—
	lamps with internal or external starter		P
	2G7, 2GX7, 2G10..... 135K:		P
	GR8; 16W..... 45K:		N
	GR8; 28W..... 35K:		N
	G10q..... under consideration:		P
	GR10q; 10, 28, 38 W..... 35K:		N
	GR10q; 16, 21 W..... 45K:		N
	GX10q, GY10q..... 135K:		N
	2G11; 18, 24, 36 W..... 135K:		P
	G23..... 135K(plastic)/80K(metal):		N
	GX23, G24, GX32..... 135K:		P
	GX24; 13, 18, 26 W..... 135K:		N
	lamps for starterless operation		N
	2G8-1..... 135K:		N
	GU10q..... 50K:		N
	GZ10q..... 40K:		N
	2G11; 40, 55, 80 W..... 135K:		P
	2GX11; 28 W..... 135K:		N
	2GX13..... 50K:		N
	GR14q..... 135K:		N
	GX24q; 32, 42, 57, 70 W..... 135K:		N
	GZ24q; 42 W..... 160K:		N

EN 61199:2011 + A1:2013 + A2:2015			
Clause	Requirement + Test	Result - Remark	Verdict

<b>Annex C</b>	<b>Information for luminaire design</b>		<b>P</b>
C.1	Guidelines for safe lamp operation		P
C.2	Maximum lamp cap temperature under abnormal operating conditions		P
	The luminaire designer should ensure that the cap temperature of the lamp, under abnormal operating conditions, does not exceed the maximum cap temperature		N
	Luminaires should be tested using the intended lamp with the starter short-circuited, i.e. the cathodes operated in series.		N
	The measuring point is given in B.2.		N

	Compliance is checked in accordance with the relevant test specified in 12.5.1 of IEC 60598-1		N
C.3	Cap/holder – Key configuration		P
	Lampholder temperature		P

Table for Annex C.2	Limit of maximum cap temperature rise		—
	lamps with internal or external starter		P
	2G7, 2GX7, 2G10..... 200K:		P
	GR8..... 110K:		N
	G10q..... 120K:		P
	GR10q..... 110K:		N
	GX10q, GY10q..... under consideration:		N
	2G11; 18, 24, 36 W..... 200K:		P
	G23..... 200K:		N
	GX23, G24, GX32..... 200K:		P
	GX24; 13, 18, 24 W..... 200K:		N
	lamps for starterless operation		N
	2G7, 2GX7, 2G10, 2G11, 2GX11..... 180K:		N
	2G8-1..... 180K:		N
	G10q..... under consideration:		N
	GR10q..... 100K:		N

EN 61199:2011 + A1:2013 + A2:2015			
-----------------------------------	--	--	--

Clause	Requirement + Test	Result - Remark	Verdict
--------	--------------------	-----------------	---------

	GU10q..... 125K:		N
	GX10q, GY10q..... under consideration:		N
	GZ10q..... 100K:		N
	2GX13..... 75K:		N
	GR14q..... 180K:		N
	G24q, GX24q, GX32q..... 180K:		N
	GZ24q; 42 W..... 160K:		N

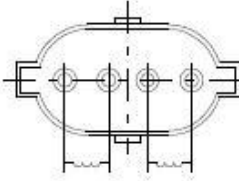
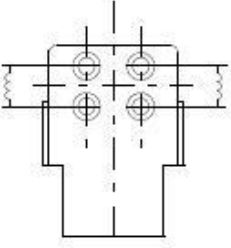
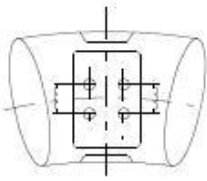
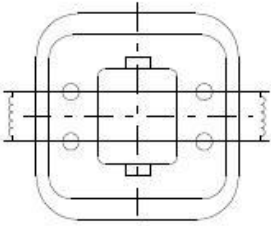
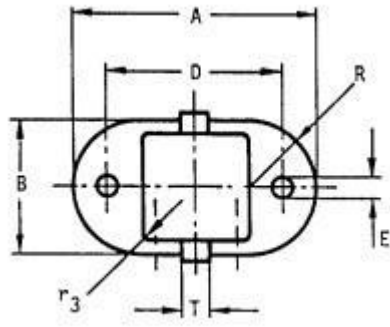
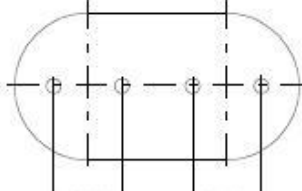
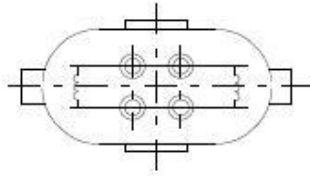
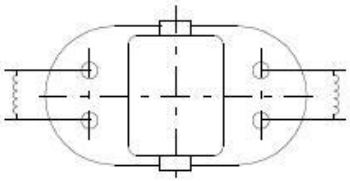
<b>Annex D</b>	<b>Conditions of compliance for design tests</b>	<b>P</b>
----------------	--	----------

<b>Annex E</b>	<b>Cathode connection configurations</b>	<b>P</b>
----------------	--	----------



EN 61199:2011 + A1:2013 + A2:2015

Clause	Requirement + Test	Result - Remark	Verdict
--------	--------------------	-----------------	---------

	 <p data-bbox="422 660 566 694">Caps 2G7, 2GX7</p>  <p data-bbox="422 996 534 1030">Cap GR10q</p>  <p data-bbox="782 996 885 1030">Cap G10q</p>  <p data-bbox="406 1321 630 1355">Caps G24q, GX24q, GZ24q</p>  <p data-bbox="518 1747 630 1780">Cap G23</p>	 <p data-bbox="1085 660 1316 694">Caps 2G10, 2G11, 2GX11</p>  <p data-bbox="1117 996 1300 1030">Caps GX10q, GY10q</p>  <p data-bbox="1085 1321 1189 1355">Cap GX32q</p> <p data-bbox="1252 1332 1348 1355">IEC 1579/11</p>	
--	--	--	--

EN 61199:2011 + A1:2013 + A2:2015			
Clause	Requirement + Test	Result - Remark	Verdict

<b>Annex F</b>	<b>Normal and abnormal lamp operation, lamp non-interchangeability requirements</b>		<b>P</b>
F.1	Maximum currents		P
F.1.1	Lamps using internal or external starter		P
F.1.2	Starterless lamps		N

F.2	Lamp non-interchangeability requirements		P
-----	--	--	---

<b>Annex G</b>	<b>Information for thermal tests</b>		<b>P</b>
----------------	--------------------------------------	--	----------

<b>Annex H</b>	<b>Information for ballast design</b>		<b>N</b>
----------------	---------------------------------------	--	----------

<b>Annex I</b>	<b>Information for lampholder design</b>		<b>N</b>
----------------	--	--	----------

<b>ANNEX 1</b>	<b>Assessment Of Lighting Equipment Related To Human Exposure To Electromagnetic Fields according to standard EN 62493:2015</b>		<b>P</b>
----------------	---	--	----------

<b>4</b>	<b>LIMITS</b>		<b>P</b>
<b>4.1</b>	<b>General</b>		<b>P</b>
	Comply with Van der Hoofden test limit in 4.2.3 or inherently compliant in 4.2.2 and pass assessment procedure for intentional radiators in 4.3		P
<b>4.2</b>	<b>Unintentional radiating part of lighting equipment</b>		<b>P</b>
4.2.2	Lighting equipment deemed to comply with the Van der Hoofden test without testing		P
	1) electronic controlgear	Yes No <input checked="" type="checkbox"/>	—
	2) incandescent-lamp technology	Yes No <input checked="" type="checkbox"/>	—
	3) LED-light-source technology	Yes No <input checked="" type="checkbox"/>	—
	4) OLED-light-source technology	Yes No <input checked="" type="checkbox"/>	—
	5) high-pressure discharge lamp	Yes No <input checked="" type="checkbox"/>	—
	6) low-pressure discharge lamp technologies with exposure distance $\geq 50$ cm	Yes No	—
	7) independent auxiliary	Yes No <input checked="" type="checkbox"/>	—

EN 61199:2011 + A1:2013 + A2:2015			
Clause	Requirement + Test	Result - Remark	Verdict

	Not fulfil any of 1-7 above subject to 4.2.3		—
4.2.3	Applications of limits		N
	Not fulfil any of 1-7 in 4.2.2 but the compliance factor $F$ is $\leq 1$		N
<b>4.3</b>	<b>Intentional radiating part of lighting equipment</b>		N
	Comply with one of methods in Clause 7 if intentional radiator		N

<b>6</b>	<b>MEASUREMENT PROCEDURE FOR THE VAN DER HOOFDEN TEST</b>		<b>N</b>
<b>6.1</b>	<b>General</b>		<b>N</b>
	Measurements carried out under conditions according Clause 6.1 – 6.6	See Table 6	N

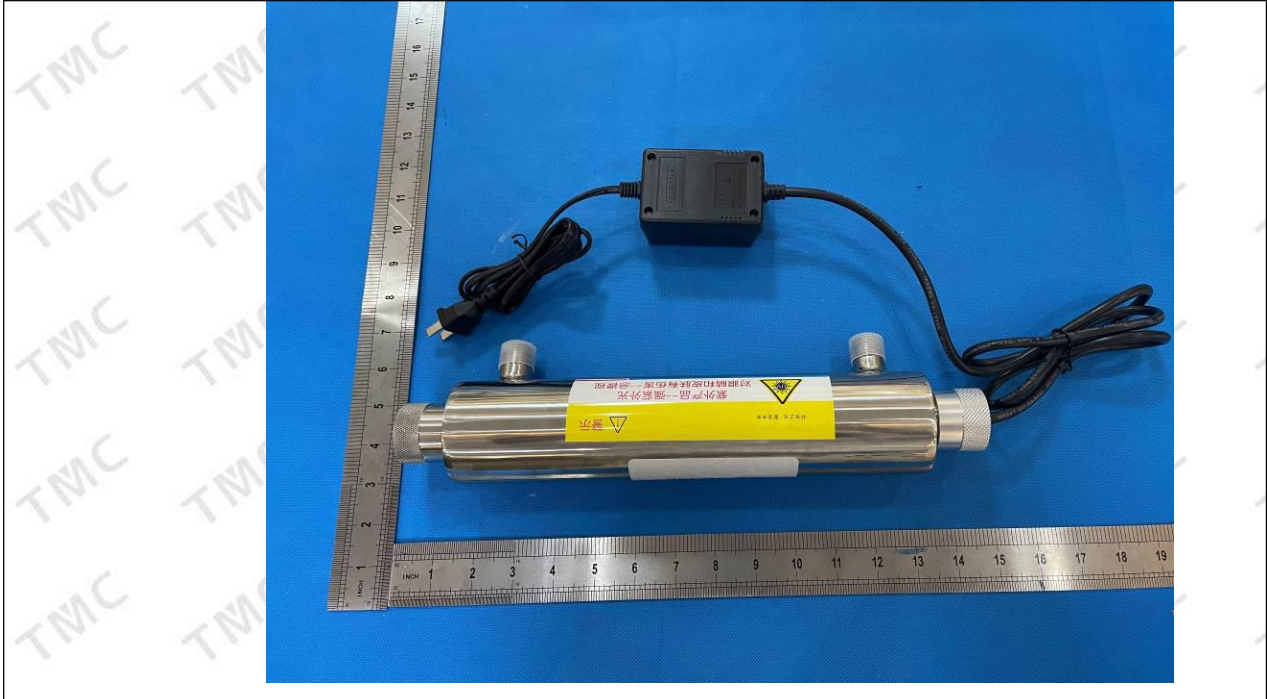
<b>7</b>	<b>ASSESSMENT PROCEDURE INTENTIONAL RADIATORS</b>		<b>N</b>
<b>7.2</b>	<b>Low-power exclusion method</b>		<b>N</b>
7.2.1	Input $P_{int,rad}$ .....		—
	Exclusion level $P_{max}$ .....		—
	Input power $P_{int,rad} < \text{exclusion level } P_{max}$		N
<b>7.3</b>	<b>Application of the EMF product standard for body worn-equipment</b>		N
	If not Clause 7.2 is met and expose distance $\leq 0.05$ m, comply with IEC 62209-2		N
<b>7.4</b>	<b>Application of the EMF product standard for base stations</b>		N
	If not Clause 7.2 is met and if intentional radiator is base station, comply with IEC 62232		N
<b>7.5</b>	<b>Application of another EMF standard</b>		N
	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		N

EN 61199:2011 + A1:2013 + A2:2015			
Clause	Requirement + Test	Result - Remark	Verdict

	<b>ANNEX 1: EMF test result according to IEC/EN 62493</b>				P
4.2.d	<b>MEASUREMENT RESULTS</b>				P
	Measuring with "Van der Hoofden" test head				P
	EUT operation model: <input checked="" type="checkbox"/> Normal operation <input type="checkbox"/> Other operation:				P
	Voltage:	230V~	Frequency:	--	--
	Temperature:	25°C	Humidity:	55% R.H.	--
	Location of EuT	Measuring distance (cm)	Result (F)	Limit (F)	Verdict
	LS-UV14W	50	0.08649	0,85	P

Details of: External View

Model : LS-UV14W



Details of: External View

Model : LS-UV14W



Details of: External View

Model : LS-UV14W



\*\*\*\*END OF TEST REPORT\*\*\*\*