

Test Report issued under the responsibility of:



<b>TEST REPORT</b> <b>IEC 62560</b> <b>Self-Ballasted LED-Lamp</b> <b>for general lighting services by voltage &gt; 50V Safety specifications</b>	
<b>Report Number</b> ..... :	6196160.50
<b>Date of issue</b> ..... :	2024-08-14
<b>Total number of pages</b> .....	21 pages (including the first page)
<b>Name of Testing Laboratory preparing the Report</b> .....	DEKRA Testing and certification (Shanghai) Ltd.
<b>Applicant's name</b> .....	Haining Puya Lighting Co.,LTD
<b>Address</b> ..... :	186 Lianghong Road, Yuanhua Town, Haining City, Zhejiang, China
<b>Test specification:</b>	
<b>Standard</b> .....	IEC 62560:2011, AMD1:2015
<b>Test procedure</b> .....	Partial test
<b>Non-standard test method</b> .....	N/A
<b>Test Report Form No.</b> .....	IEC62560C
<b>Test Report Form(s) Originator</b> .... :	DEKRA Certification B.V.
<b>Master TRF</b> .....	Dated 2018-12-21
<b>Test item description</b> ..... :	LED lamp
<b>Trade Mark</b> ..... :	
<b>Manufacturer</b> .....	Haining Puya Lighting Co.,LTD 186 Lianghong Road, Yuanhua Town, Haining City, Zhejiang, China
<b>Model/Type reference</b> .....	PY-R7S-4W-230-CCT-80-WPS-470; PY-R7S-4W-230-CCT-80-WPS-500; PY-R7S-5W-230-CCT-80-WPS-600; PY-R7S-8W-230-CCT-80-WPS-900; PY-R7S-9.5W-230-CCT-80-WPS-1100 ; PY-R7S-11W-230-CCT-80-WPS-1500.
<b>Ratings</b> ..... :	220-240 V~; 50 / 60 Hz; 4 -11 W; R7s (For details see annex model list)

<b>Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):</b>		
<input checked="" type="checkbox"/>	<b>Testing Laboratory:</b>	DEKRA Testing and certification (Shanghai) Ltd.
	<b>Testing location/ address.....:</b>	3F, #250 Jiangchangsan Road, Building 16, Headquarter Economy Park Shibe Hi-Tech Park, Jing'an District, Shanghai, 200436, China
	<b>Tested by (name, function, signature).....:</b>	Chenjie Liu (Project handler) 
	<b>Approved by (name, function, signature)....:</b>	Steven Bao (Project reviewer) 
<input type="checkbox"/>	<b>Testing procedure: CTF Stage 1:</b>	
	<b>Testing location/ address.....:</b>	
	<b>Tested by (name, function, signature).....:</b>	
	<b>Approved by (name, function, signature)....:</b>	
<input type="checkbox"/>	<b>Testing procedure: CTF Stage 2:</b>	
	<b>Testing location/ address.....:</b>	
	<b>Tested by (name + signature).....:</b>	
	<b>Witnessed by (name, function, signature) .:</b>	
	<b>Approved by (name, function, signature)....:</b>	
<input type="checkbox"/>	<b>Testing procedure: CTF Stage 3:</b>	
<input type="checkbox"/>	<b>Testing procedure: CTF Stage 4:</b>	
	<b>Testing location/ address.....:</b>	
	<b>Tested by (name, function, signature).....:</b>	
	<b>Witnessed by (name, function, signature) .:</b>	
	<b>Approved by (name, function, signature)....:</b>	
	<b>Supervised by (name, function, signature) :</b>	

<b>List of Attachments (including a total number of pages in each attachment):</b> N/A	
<b>Summary of testing:</b>	
<p><b>Tests performed (name of test and test clause):</b>  <b>Original report: (6113155.50)</b>  Following test clause are tested according to client's requirement:</p> <ul style="list-style-type: none"> <li>5 Marking</li> <li>6 Interchangeability</li> <li>7 Protection against accidental contact with live parts</li> <li>8 Insulation resistance and electric strength</li> <li>10 Cap temperature rise</li> <li>11 Resistance to heat</li> <li>12 Resistance to flame and ignition</li> <li>13 fault conditions</li> <li>14 (16) Creepage distances and clearances (except one pins to other pins)</li> <li>16 Test conditions for dimmable lamps</li> <li>17 Photobiological safety</li> </ul> <p><b>Amendment 1 report: (6196160.50)</b>  <ul style="list-style-type: none"> <li>8 Insulation resistance and electric strength</li> <li>10 Cap temperature rise</li> <li>11 Resistance to heat</li> <li>12 Resistance to flame and ignition</li> <li>13 fault conditions</li> <li>14 (16) Creepage distances and clearances (except one pins to other pins)</li> </ul> </p>	<p><b>Testing location:</b>  DEKRA Testing and Certification (Shanghai) Ltd.   3F, #250 Jiangchangsan Road, Building 16,  Headquarter Economy Park Shibe Hi-Tech Park,  Jing'an District, Shanghai, 200436, China</p>
<b>Summary of compliance with National Differences (List of countries addressed):</b> European Group and British Group differences. <input checked="" type="checkbox"/> <b>The product fulfils the requirements of EN 62560: 2012+A1:2015+A11:2019 (partial)</b> <b>BS EN 62560: 2012+A11:2019 (partial).</b>	

**Copy of marking plate:**

**The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.**

On the enclosure:

MODEL: PY-R7S-11W-230-CCT-80-WPS-1500

Voltage: AC220-240V 50/60Hz

Wattage: 11W

CCT: 2700K

MADE IN CHINA

Haining Puya Lighting Co.,Ltd

186 Lianhong Road, Yuanhua Town, Haining City, Zhejiang, China



On packing or manual



or 'Use in Dry Locations only'

Note:

1. The height of the graphical symbol of lamp not suitable for use under moisture shall be at least 5 mm.
2. The symbol combination of WEEE logo shall have a minimum height of 7 mm.
3. The CE marking must have substantially the same vertical dimension, which may not be less than 5 mm.

<b>Test item particulars</b> .....: LED lamp	
<b>Classification of installation and use</b> .....: Normal use	
<b>Supply Connection</b> .....: R7s cap	
.....: --	
<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> .....: 2024-07-03	
<b>Date (s) of performance of tests</b> .....: 2024-07-03 to 2024-08-14	
<b>General remarks:</b>	
<p>The measurement result is considered in conformance with the requirement if it is within the prescribed limit. It is not necessary to calculate the uncertainty associated with the measurement result.</p> <p>The test results presented in this report relate only to the object tested.</p> <p>The information provided by the customer in this report may affect the validity of the results, the test lab is not responsible for it.</p> <p>This report shall not be reproduced, except in full, without the written approval.</p> <p>This report is not used for social proof in China market.</p> <p>"(See Enclosure #)" refers to additional information appended to the report.</p> <p>"(See appended table)" refers to a table appended to the report.</p>	
<b>Throughout this report a <input checked="" type="checkbox"/> comma / <input type="checkbox"/> point is used as the decimal separator.</b>	
<ul style="list-style-type: none"> <li>- EN 62493:2015+A1:2022</li> <li>- BS EN 62493:2015+A1:2022.</li> </ul>	
<b>Manufacturer's Declaration per sub-clause 4.2.5 of IEC60335-1:</b>	
The application for obtaining a 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>	
Name and address of factory (ies) ..... : Haining Puya Lighting Co.,LTD 186 Lianghong Road, Yuanhua Town, Haining City, Zhejiang, China	

**General product information:**

Original report:

The products are self-ballasted LED lamps with non-SELV driver and they are no-dimmable.

All models have same electrical construction, circuit diagram and similar PCB layout but different temperature, length and wattage.

Therefore, full tests are applied on model PY-R7S-9.5W-230-CCT-80-WPS-1100 due to highest wattage.

The product is classified as RG1 according to EN 62471:2008 and IEC/TR 62778:2014 test result was laid down in DEKRA test report 6113156.50P.

These products comply with EMF requirements according to EN 62493:2015 without test.

**Amendment 1 report:**

This report is based on original test report Ref. No. 6113155.50, dated on 2021-10-21, to include the following changes:

- Add new model: PY-R7S-11W-230-CCT-80-WPS-1500, and listed in model list with bold letters.
- Change the model name and declared power for details see below table:

Model name	Original model name	Declared power (W)	Original declared Power (W)
PY-R7S-4W-230-CCT-80-WPS-470	PY-R7S-4W-230-CCT-80-WPS-500	4	4
PY-R7S-4W-230-CCT-80-WPS-500	PY-R7S-4.9W-230-CCT-80-WPS-600	4	4,9
PY-R7S-5W-230-CCT-80-WPS-600	PY-R7S-8W-230-CCT-80-WPS-1055	5	8
PY-R7S-8W-230-CCT-80-WPS-900	PY-R7S-9W-230-CCT-80-WPS-1100	8	9
PY-R7S-9.5W-230-CCT-80-WPS-1100	PY-R7S-9.5W-230-CCT-80-WPS-1100	9,5	10

The new model PY-R7S-11W-230-CCT-80-WPS-1500 have same mechanical construction, electrical construction, circuit diagram with original model PY-R7S-9.5W-230-CCT-80-WPS-1100 but different PCB layout.

After review, tests in "Summary of testing" were considered necessary and have been performed on model PY-R7S-11W-230-CCT-80-WPS-1500 due to with different PCB layout.

The products were classified as RG1 according to EN 62471:2008 and IEC/TR 62778:2014 test result was laid down in DEKRA test report 6196161.50P.

These products comply with EMF requirements according to EN 62493:2015+A1:2022 without testing.

IEC 62560			
Clause	Requirement + Test	Result - Remark	Verdict

4	GENERAL REQUIREMENTS		P
4.1	The lamp shall be so designed and constructed that in normal use cause no danger to the user.		P
4.2	Self-ballasted LED-Lamp are non-repairable.		P

5	MARKING		P
5.1	Mandatory marking		P
	- mark of origin		P
	- rated supply voltage (V) .....	220 -240 V~	P
	- rated wattage (W) .....	See annex model list	P
	- rated frequency (Hz).....	50 / 60	P
5.2	Addition marking		P
	- rated current (A) .....	On manual or packing See annex model list	P
	- weight significantly higher		N/A
	- special conditions or restrictions		P
	Not suitable for dimming; symbol  used	On label	P
	- not suitable for water contact	On manual or packing	P
5.3	Marking durable and legible		P
	rubbing 15 s water, 15 s petroleum; marking legible		P

6	INTERCHANGEABILITY		P
6.1	Cap interchangeability in accordance with IEC 60061-1		P
	Gauge in accordance with IEC 60061-3	R7s cap: checked in accordance with sheet 7004- 92-3 of IEC 60061-1	P
6.2	Bending moment and mass imparted by the lamp at the lampholder		N/A
	Bending moment imparted by the lamp at the lampholder (Nm).....		N/A
	Mass not exceeding value table 2 or as specified in IEC 60061-1 (kg) .....		N/A

IEC 62560			
Clause	Requirement + Test	Result - Remark	Verdict

<b>7</b>	<b>PROTECTION AGAINST ACCIDENTAL CONTACT WITH LIVE PARTS</b>		<b>P</b>
	Internal, basic insulated or live metal parts not accessible		P
	Tested with a test finger with a force of 10 N		N/A
	Compliance checked with appropriate gauges		N/A

<b>8</b>	<b>INSULATION RESISTANCE AND ELECTRIC STRENGTH</b>		<b>P</b>
8.2	After storage 48 h at 91-95% relative humidity and 20-30 °C measuring of insulation resistance with d.c. 500 V (MΩ):		P
	≥ 4 MΩ for double or reinforced insulation .....	5000 MΩ	P
8.3	Immediately after clause 8.2 electric strength test for 1 min		P
	Double or reinforced insulation, 4U + 2000 V		P
	No flashover or breakdown		P

<b>9</b>	<b>MECHANICAL STRENGTH</b>		<b>N/A</b>
9.2.1	Torsion resistance of unused lamps		N/A
	B15d or E14 Cap.....	1,15 Nm	N/A
	B22d, E26, E26d or E27 Cap.....	3,0 Nm	N/A
	E11 or E12 Cap.....	0,8 Nm	N/A
	E17 Cap .....	1,5 Nm	N/A
	E39 or E40 Cap.....	5,0 Nm	N/A
	GX53 Cap .....	3,0 Nm	N/A
<b>9.3</b>	<b>Compliance criteria</b>		<b>N/A</b>
	Clause 8 shall comply after the mechanical strength test.		N/A
<b>9.4</b>	<b>Axial strength of Edison caps</b>		<b>N/A</b>
	After full insertion into the gauge an axial force of Table 4 is applied to the central contact (N) .....		N/A
	The insulation around the central contact shall remain intact		N/A

<b>10</b>	<b>CAP TEMPERATURE RISE</b>		<b>P</b>
	The cap temperature rise $\Delta t_s$ of the lamp shall not exceed 120 K.		P

Annex – Deviations of EN 62560:2012+A11:2019			
Clause	Requirement + Test	Result - Remark	Verdict
<b>11</b>	<b>RESISTANCE TO HEAT</b>		<b>P</b>
	Parts of insulating material providing protection against electric shock, retaining live parts in position, ball-pressure test:	(see appended table)	P
<b>12</b>	<b>RESISTANCE TO FLAME AND IGNITION</b>		<b>P</b>
	External parts of insulating material preventing electric shock glow-wire test 650 °C	(see appended table)	P
<b>13</b>	<b>FAULT CONDITIONS</b>		<b>P</b>
13.2	Fault conditions: where diagram indicates fault condition impairs safety, electronic components have been short-circuited or disconnected	(see appended table)	P
13.3	When operated under fault conditions the lamp		P
	- does not emit flames or molten material		P
	- does not produce flammable gases or smoke		P
	- live parts not accessible		P
	After the tests the insulation resistance with d.c. 1000 V complies with requirements of Cl. 8.1 ..... :	5000 MΩ	P
<b>14 (16)</b>	<b>CREEPAGE DISTANCES AND CLEARANCES</b>		<b>P</b>
	Creepage distances and clearances according to IEC 61347-1	(see appended table)	P
	Conductive accessible parts according to IEC 60598-1	(see appended table)	P
<b>15</b>	<b>ABNORMAL OPERATION</b>		<b>P</b>
	Non-dimmable self-ballasted lamps are tested on a dimmer or an electronic switch according the test circuit shown in Figure 8		P
	Operate the lamp for 8 h at most onerous dimming level		P
	When operated under abnormal operation the lamp		P
	- does not catch fire		P
	- does not produce flammable gases		P
	- live parts not accessible		P

Annex – Deviations of EN 62560:2012+A11:2019			
Clause	Requirement + Test	Result - Remark	Verdict
<b>16</b>	<b>TEST CONDITIONS FOR DIMMABLE LAMPS</b>		<b>N/A</b>
	Test are carried out at maximum power setting for Clause 10 and Clause 17		N/A
<b>17</b>	<b>PHOTOBIOLOGICAL SAFETY</b>		<b>P</b>
<b>17.1</b>	<b>UV radiation</b>		N/A
	The LED lamp doesn't exceed 2mW/klm		N/A
<b>17.2</b>	<b>Blue light hazard</b>		<b>P</b>
	Assessed according to IEC TR 62778		P
	LED lamps shall be RG0 or RG1	RG1	P
<b>18</b>	<b>INGRESS PROTECTION</b>		<b>N/A</b>
18.1	Lamps shall be suitable for water contact unless marked with Figure 6		N/A
18.2	The lamp is subjected to an IPX4 test according to IEC 60598-1		N/A
	The lamp complies with the compliance provisions of 9.2 of IEC 60598-1		N/A
	Lamps constructed so that it is sealed to exclude water need not to be tested		N/A

Annex – Deviations of EN 62560:2012+A11:2019			
Clause	Requirement + Test	Result - Remark	Verdict
<b>11</b>	<b>TABLE: Ball Pressure Test of Thermoplastics</b>		<b>P</b>
<b>Allowed impression diameter (mm) .....</b>		2,0 mm	—
Object/ Part No./ Material	Manufacturer/ trademark	Test temperature (°C)	Impression diameter (mm)
Plastic on lamp cap	See annex 1	125	0,9
PCB	See annex 1	125	0,5
Supplementary information: N/A			

<b>12</b>	<b>TABLE: Resistance to heat and fire - Glow wire tests</b>			<b>P</b>
Object/ Part No./ Material	Manufacturer/ trademark	Glow wire test (GWT); (°C)		Verdict
		650		
		te	ti	
Plastic on lamp cap	See annex 1	0s	0s	P
PCB	See annex 1	0s	0s	P

<b>13</b>	<b>TABLE: tests of fault conditions</b>			<b>P</b>
Part	Simulated fault	Result		Hazard
Tests performed on model PY-R7S-9.5W-230-CCT-80-WPS-1100				
D1	Short- circuited	nothing impairs safety		NO
D2	Short- circuited	nothing impairs safety		NO
D3	Short- circuited	nothing impairs safety		NO
D4	Short- circuited	nothing impairs safety		NO
IC1	Short- circuited	nothing impairs safety		NO
IC2	Short- circuited	nothing impairs safety		NO
Trace	Short- circuited	nothing impairs safety		NO
Tests performed on model PY-R7S-11W-230-CCT-80-WPS-1500				
D1	Short- circuited	nothing impairs safety		NO
D2	Short- circuited	nothing impairs safety		NO
D3	Short- circuited	nothing impairs safety		NO
D4	Short- circuited	nothing impairs safety		NO
IC1	Short- circuited	nothing impairs safety		NO
IC2	Short- circuited	nothing impairs safety		NO
IC3	Short- circuited	nothing impairs safety		NO
CE	Short- circuited	nothing impairs safety		NO
Trace	Short- circuited	nothing impairs safety		NO

<b>14</b>	<b>TABLE: Clearance And Creepage Distance Measurements</b>						<b>P</b>
clearance cl and creepage distance dcr at/of:	Up (V)	U r.m.s. (V)	Required cl (mm)	cl (mm)	required dcr (mm)	dcr (mm)	
Tests performed on model PY-R7S-9.5W-230-CCT-80-WPS-1100							

Annex – Deviations of EN 62560:2012+A11:2019						
Clause	Requirement + Test			Result - Remark		Verdict
L to N on PCB	--	240	1,5	2,8	2,5	2,8
Live part and enclosure	--	240	3	>8	5	>8
Tests performed on model PY-R7S-11W-230-CCT-80-WPS-1500						
L to N on PCB	--	240	1,5	2,6	2,5	2,6
Live part and enclosure	--	240	3	>8	5	>8
Supplementary information:						
1. Reinforced insulation of IEC 60598-1 was taken into account when measuring distance between live part and accessible part.						

Annex – Deviations of EN 62560:2012+A11:2019			
Clause	Requirement + Test	Result - Remark	Verdict

Annex 1	TABLE: Critical components information					P
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity <sup>1)</sup>	
PCB (PTI≥600)	Dongguan Xinguo Electronics Co.,Ltd	sapphire	1600 V; 1400 °C	EN 62560	Tested in appliance	
Lamp cap	Haining Ou Long Plastic Products Factory	R7s	PBT	EN 62560	Tested in appliance	
LED	Haining Puya Lighting Co.,Ltd	--	IF: <120 mA; VF: 2,9 – 3,2 V	IEC/TR 62778	Tested in appliance	
Internal wire	Jiangsu Kunlun Light Source Material Co., LTD	--	Diameter: 0,5 mm	EN 62560	Tested in appliance	

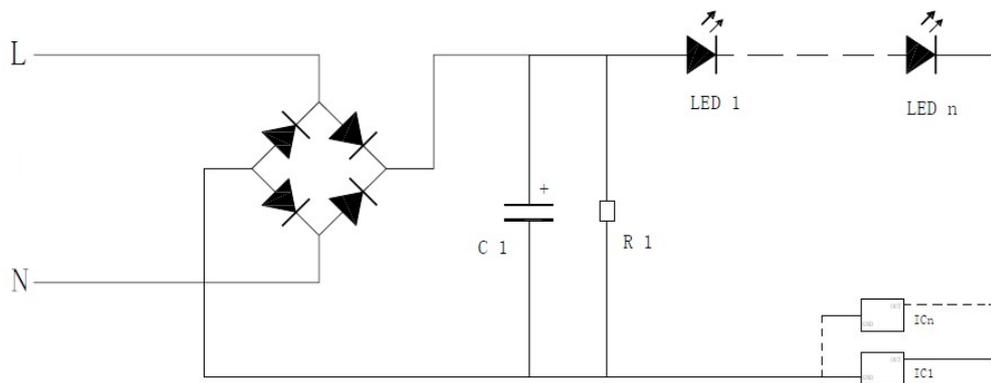
**Supplementary information:**  
**1) Provided evidence ensures the agreed level of compliance. See OD-CB2039.**

#### Annex Dimensions test according the clauses 6.1:

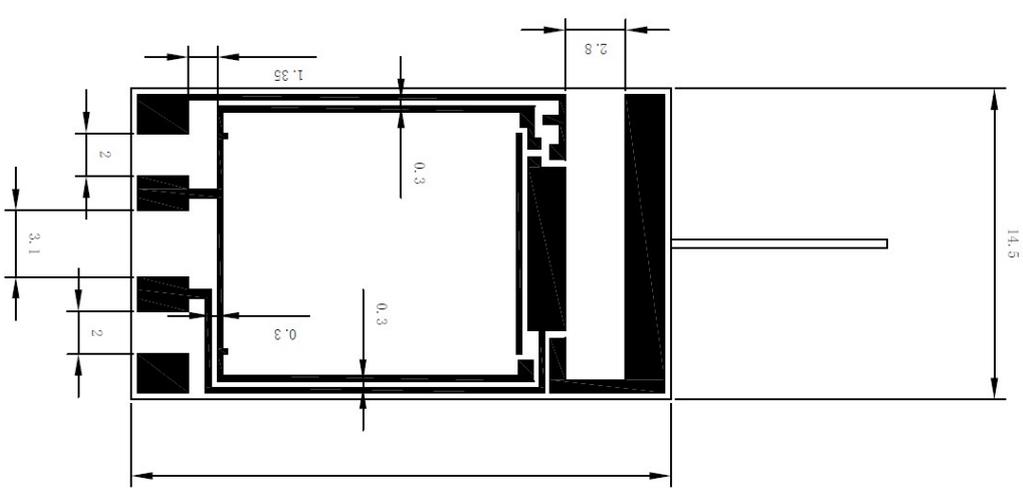
Caps on finished lamps (R7s cap for model PY-R7S-9.5W-230-CCT-80-WPS-1100 )				
Dimension (point)	Requirement		Measure(mm)	Result
	Min(mm)	Max(mm)		
E	--	7,49	7,26	P
F	4,19	4,45	4,2	P
G*	2,8	--	3,2	P
J	--	2,03	1,41	P
J1	0,5	--	0,76	P
L	2,9	--	4,73	P
M(4)	--	4,06	3,62	P
N(2)	2,0	3,8	2,41	P
U	--	9,0	8,87	P
V(3)	--	8,0	3,49	P
X(6)	15,5	--	15,8	P

Annex – Deviations of EN 62560:2012+A11:2019			
Clause	Requirement + Test	Result - Remark	Verdict
<b>7</b>	<b>PROTECTION AGAINST ACCIDENTAL CONTACT WITH LIVE PARTS</b>		<b>P</b>
7.Z2	Fixing of conductors		P
7.Z2.1	Two independent fixings		P
	Parts fixed by screws or nuts provided with self-locking washers or other means of locking		N/A
7.Z2.2	Force of 10 N in the most unfavourable direction.		P
	Clearances or creepage distances not reduced		P

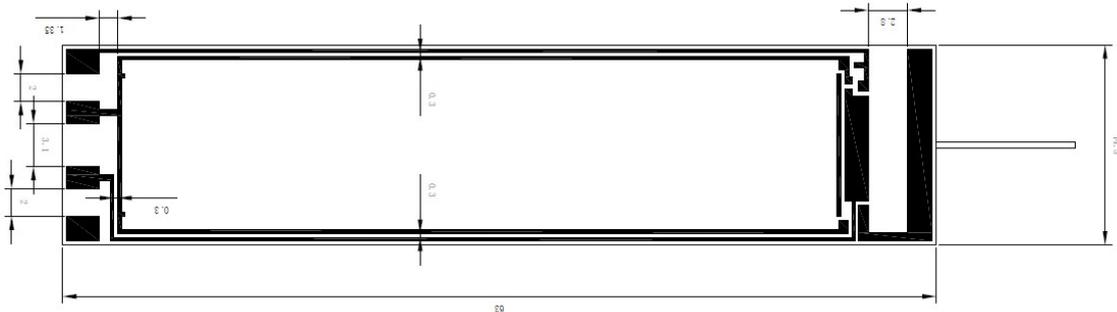
Annex schematic circuit and PCB layout:



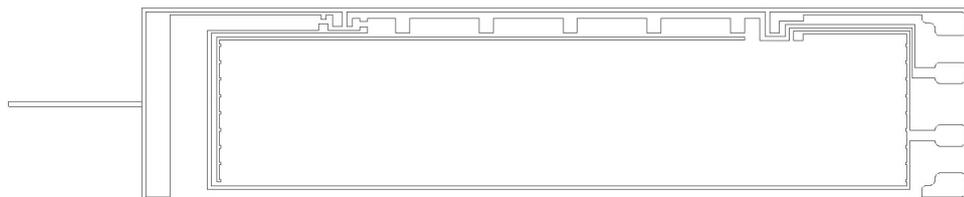
Schematic circuit



PCB layout 1 for 4 W models



PCB layout 2 for 5 W – 9,5 W models



PCB layout 3 for 11 W models

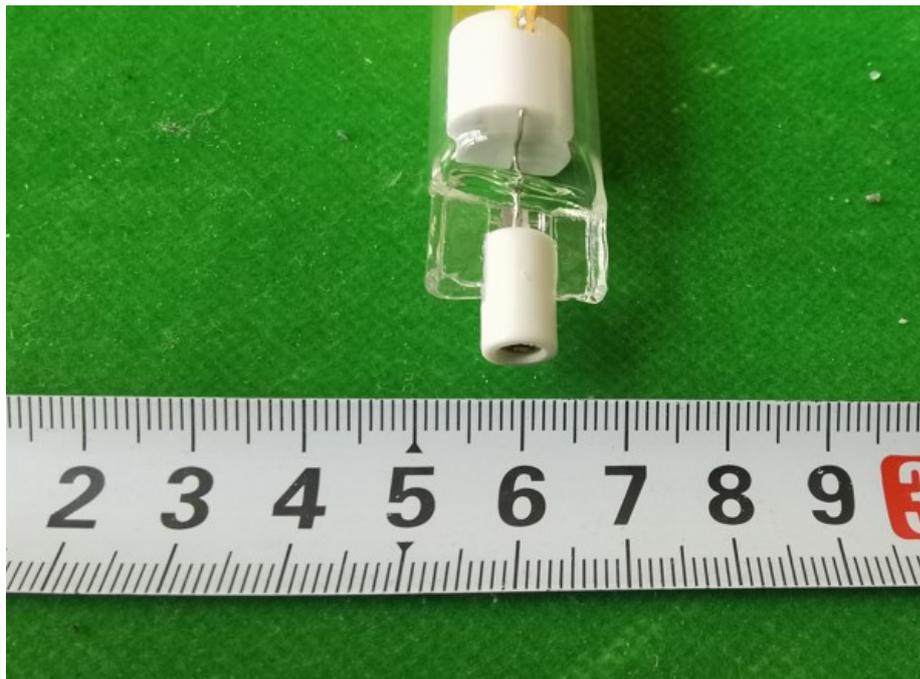
Annex model list:

Model name	Voltage; Frequency (V~; Hz)	Rated wattage (W)	Rated current (A)	Size (mm)	Layout
PY-R7S-4W-230-CCT-80-WPS-470	220-240V~; 50/60 Hz	4	0,036	Φ16*78	1
PY-R7S-4W-230-CCT-80-WPS-500	220-240V~; 50/60 Hz	4	0,042	Φ18*78	
PY-R7S-5W-230-CCT-80-WPS-600	220-240V~; 50/60 Hz	5	0,068	Φ18*78	2
PY-R7S-8W-230-CCT-80-WPS-900	220-240V~; 50/60 Hz	8	0,075	Φ16*118	
PY-R7S-9.5W-230-CCT-80-WPS-1100	220-240V~; 50/60 Hz	9,5	0,082	Φ16*118	
PY-R7S-11W-230-CCT-80-WPS-1500	220-240V~; 50/60 Hz	11	0,082	Φ18*118	3

Annex pictures:



Over view for 8 W to 9,5 W models



R7s cap

Annex pictures:



Internal view



Internal view

Annex pictures:



PCB layout



PCB layout

Annex pictures:

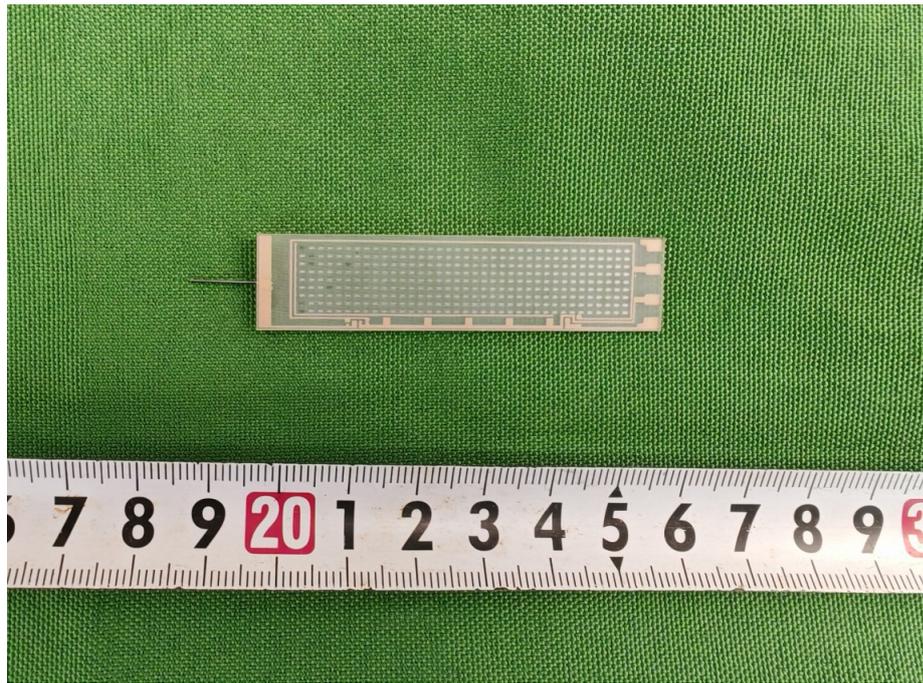


Overview 4 W – 5 W models



Over view for 11 W models

Annex pictures:



PCB 3 for 11W models

-----END-----