1.0 Reference and Address			
Report Number	250408173GZU-001	Original Issued: 6-May-2025	Revised: None
Standard(s)	Self-Ballasted Lamps and Lamp Adapters [UL 1993:2024 Ed.6] Self-ballasted Lamps and Lamp Adapters [CSA C22.2#1993:2024 Ed.4]		

Applicant	XIAMEN PVTECH CORPORATION LTD.	Manufacturer 1	**XIAMEN PVTECH CORPORATION LTD.**
Address	No.200 Middle Neian Road, XIAMEN Fujian 361101	Address	No.200 Middle Neian Road, XIAMEN Fujian 361101
Country	China	Country	China
Contact	Owen Kieng Wang	Contact	Owen Kieng Wang
Phone	+86-0592-2658882-612	Phone	+86-0592-2658882-612
FAX	+86-0592-2658883	FAX	+86-0592-2658883
Email	sale10@pvtech.com.cn rd59@pvtech.com.cn	Email	sale10@pvtech.com.cn rd59@pvtech.com.cn

Manufacturer 2	**PVTECH LIGHTING(BW VIETNAM) CO., LTD**
Address	Factory B3-3 And B3-4, Lot 5, Cam Dien– Luong Dien Industrial Park, Phuc Dien Commune, Cam Giang District, Hai Duong Province
Country	VIETNAM
Contact	Song Wencai Owen Luo
Phone	0352958176
FAX	NA
Email	owen@pvtech.com.cn

2.0 Product Description

Product	Self-ballasted LED lamps
Brand name	NA
Description	The products covered by this report are self-ballasted LED lamps, which are suitable for damp locations use.
Models	PVLB-38CM-50W or PVLB-28CM-30W; followed by one character; followed by C or F; followed by -; followed by up to two characters; followed by K. PVLB-38CM-50WXF-50K, PVHB-LB01-050W-01.
Model Similarity	All models have the similar mechanical and electrical constructions except for the size and wattage. Model name: PVLB-38CM-50W&#-xxK or PVLB-28CM-30W&#-xxK; &: which represent LED, can be any letters; #: which represent outlook of diffuser, can be C = Clear, F = Frosted; xxK: which represent CCT. Models PVLB-38CM-50WXF-50K, PVHB-LB01-050W-01 are the same except for model name.
Ratings	AC 120/277V, 60Hz;

Model no.	Input current	Input wattage	Lamp base	No. of LED	Weight	Size
PVLB-38CM-50W&#-xxK	462mA	50W	E26	270pcs	680g	380mm
PVLB-28CM-30W&#-xxK	378mA	30W	E26	180pcs	380g	280mm

Other Ratings	NA

3.0 Product Photographs

Photo 1 - External view of model PVLB-38CM-50W&#-xxK

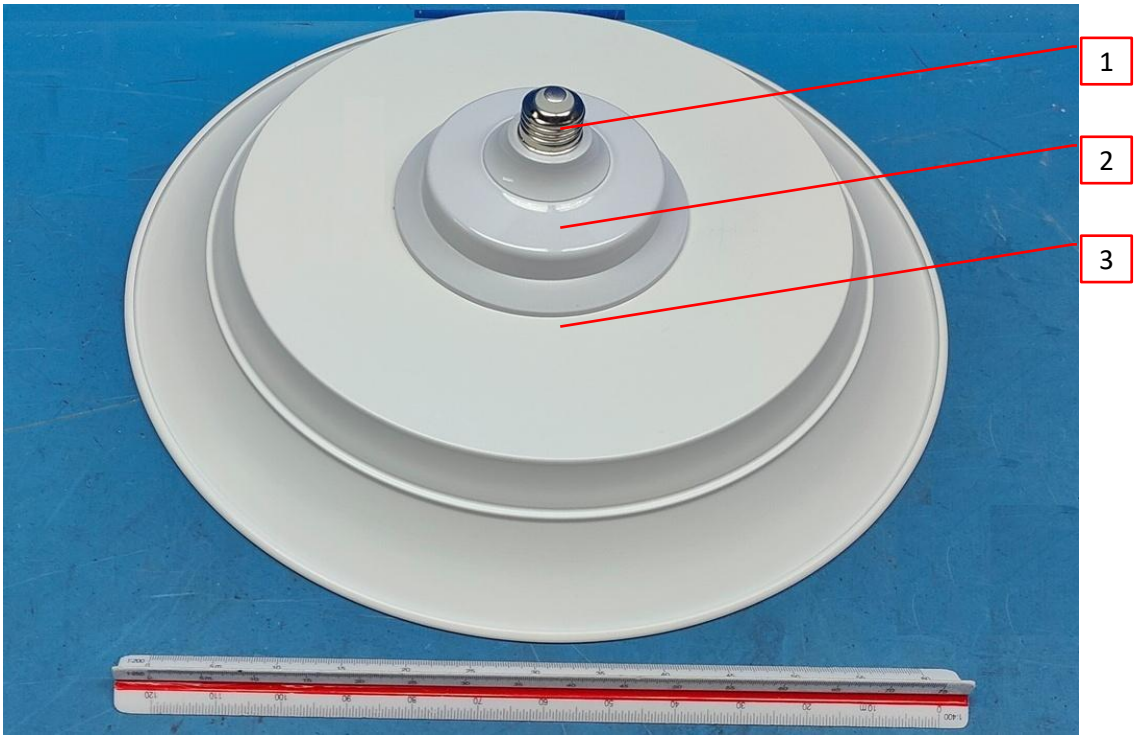
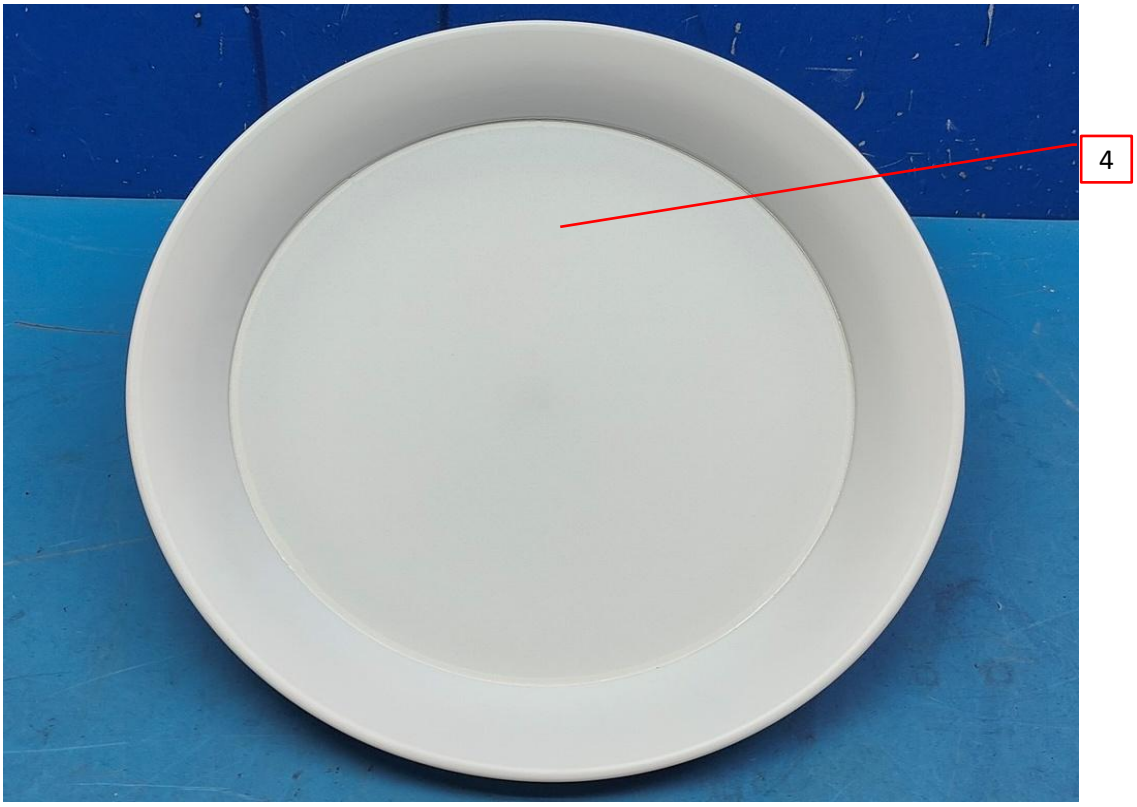


Photo 2 - External view of model PVLB-38CM-50W&#-xxK



3.0 Product Photographs

Photo 3 - Internal view of model PVLB-38CM-50W&#-xxK

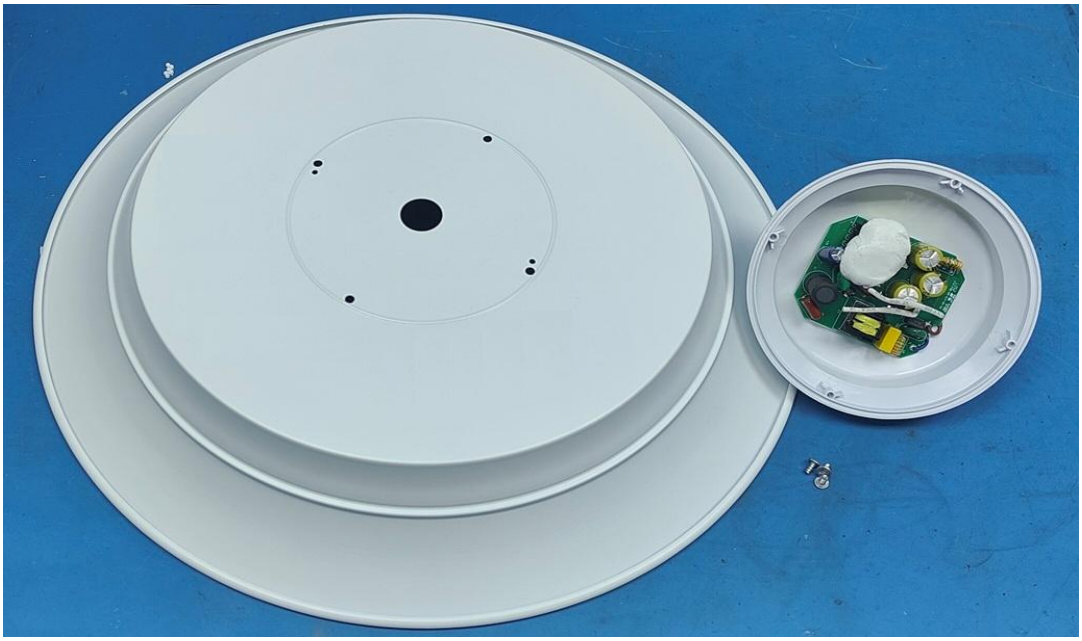
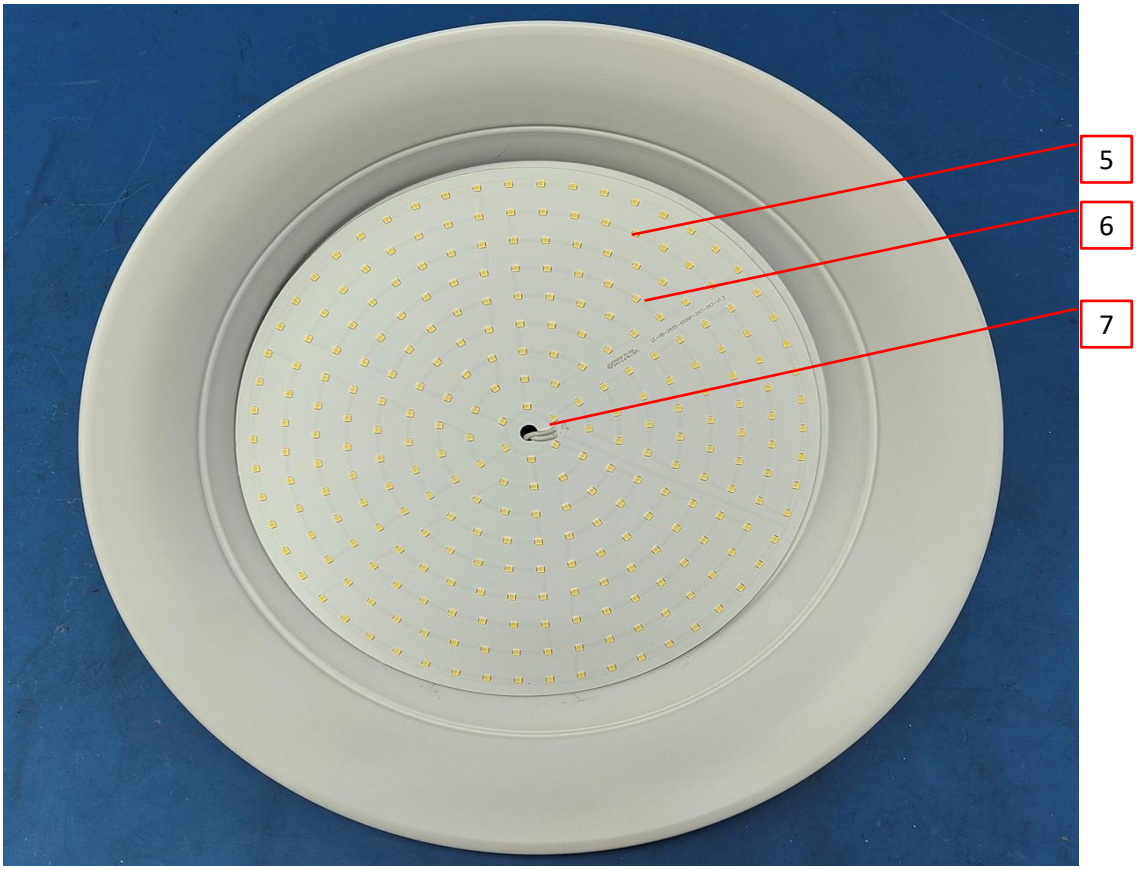


Photo 4 - Internal view of model PVLB-38CM-50W&#-xxK



3.0 Product Photographs

Photo 5 - External view of model PVLB-28CM-30W&#-xxK

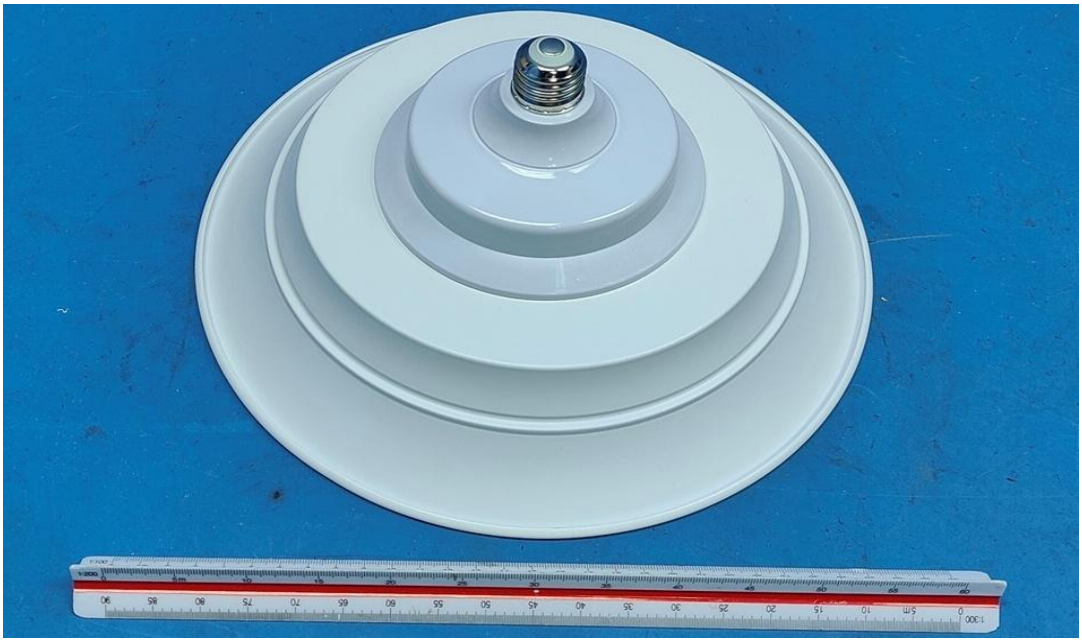


Photo 6 - External view of model PVLB-28CM-30W&#-xxK

3.0 Product Photographs

Photo 7 - Internal view of model PVLB-28CM-30W&#-xxK

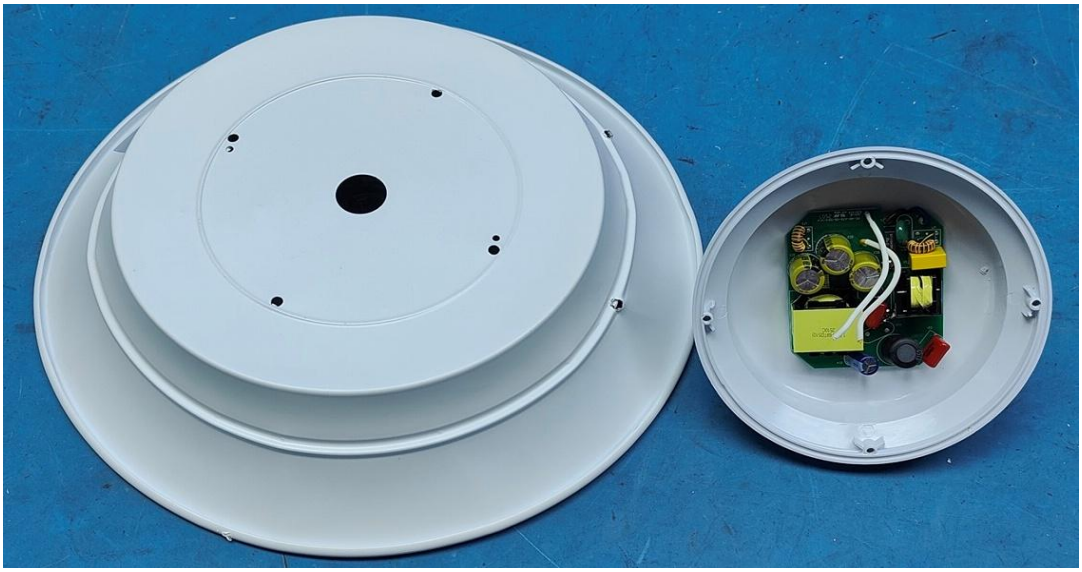


Photo 8 - Internal view of model PVLB-28CM-30W&#-xxK

3.0 Product Photographs

Photo 9 - LED driver view of model PVLB-38CM-50W&#-xxK

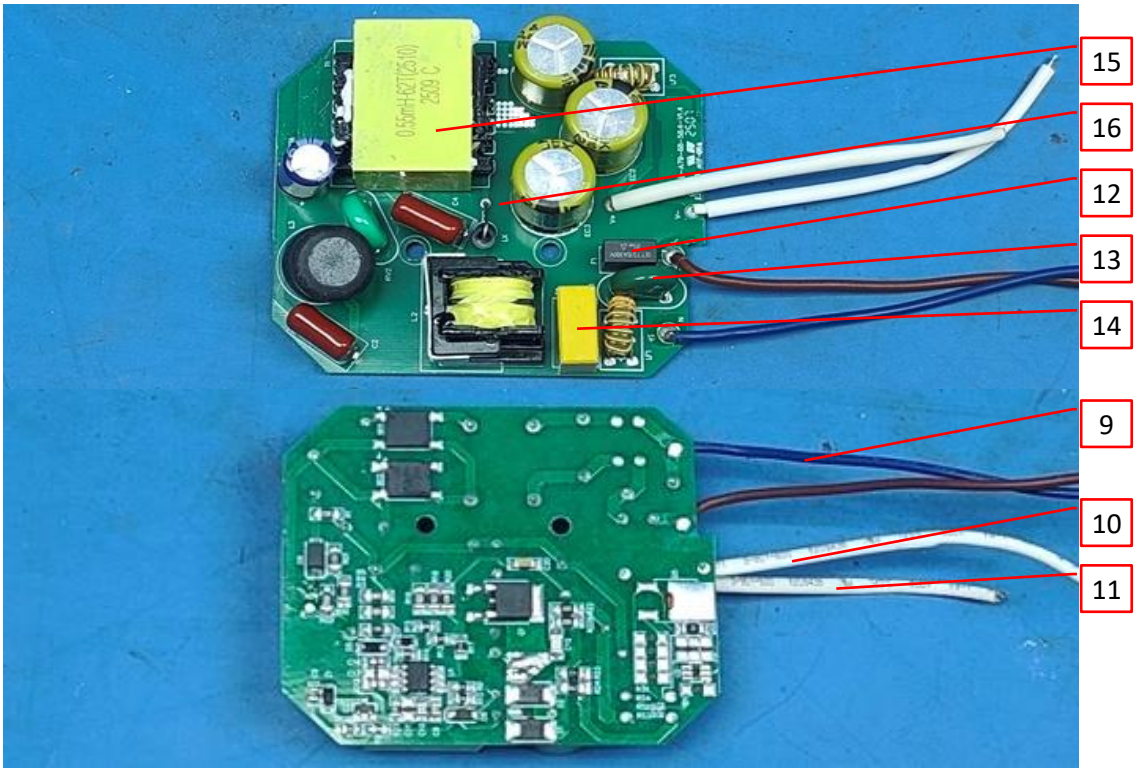
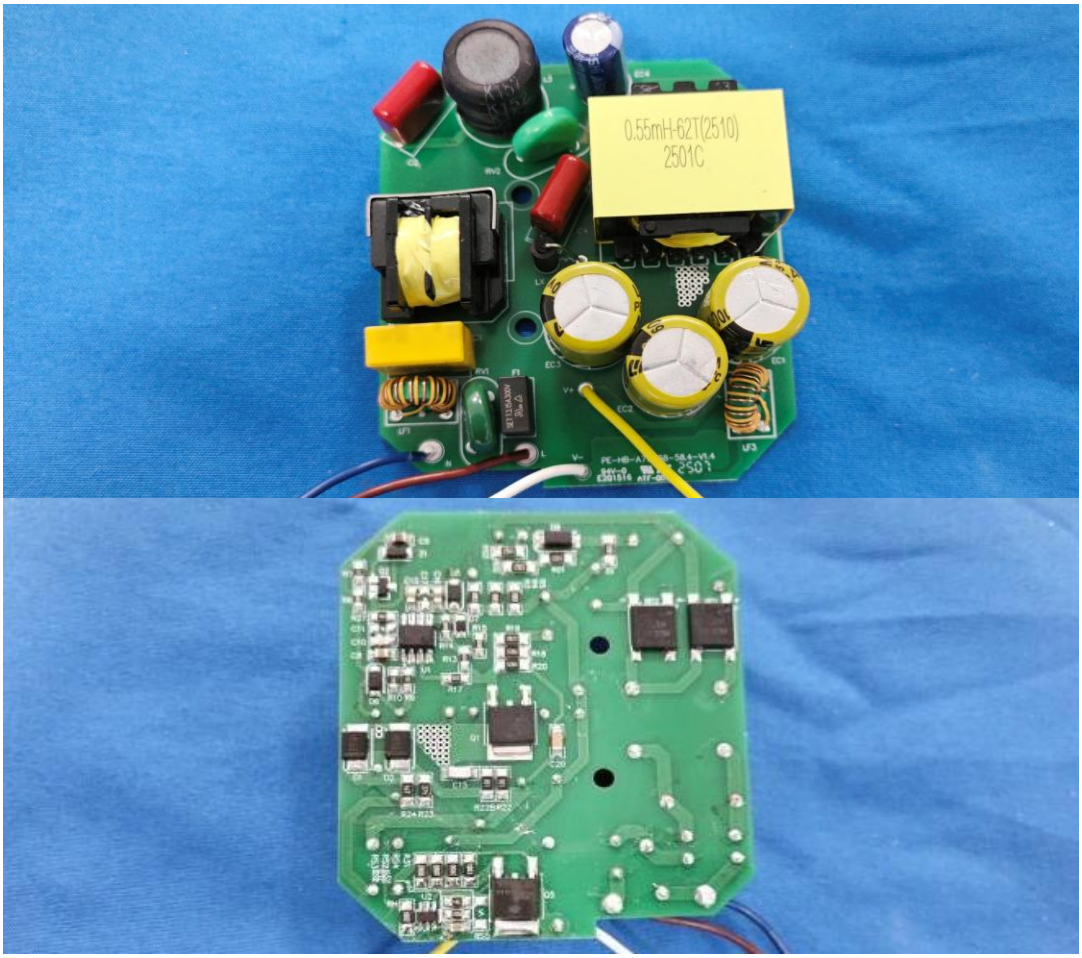


Photo 10 - Altenate LED driver view of model PVLB-38CM-50W&#-xxK, with strobing circuit



3.0 Product Photographs

Photo 11 - LED driver view of model PVLB-28CM-30W&#-xxK

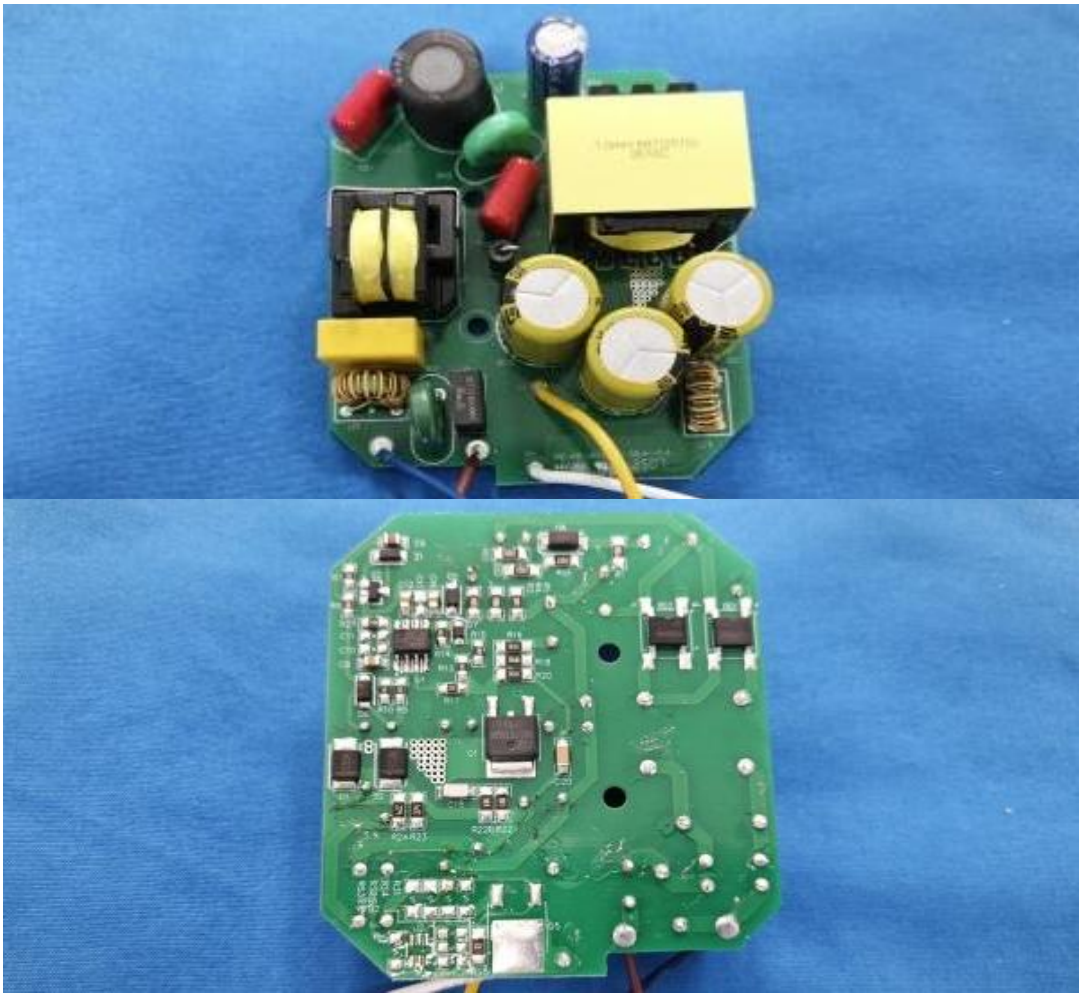
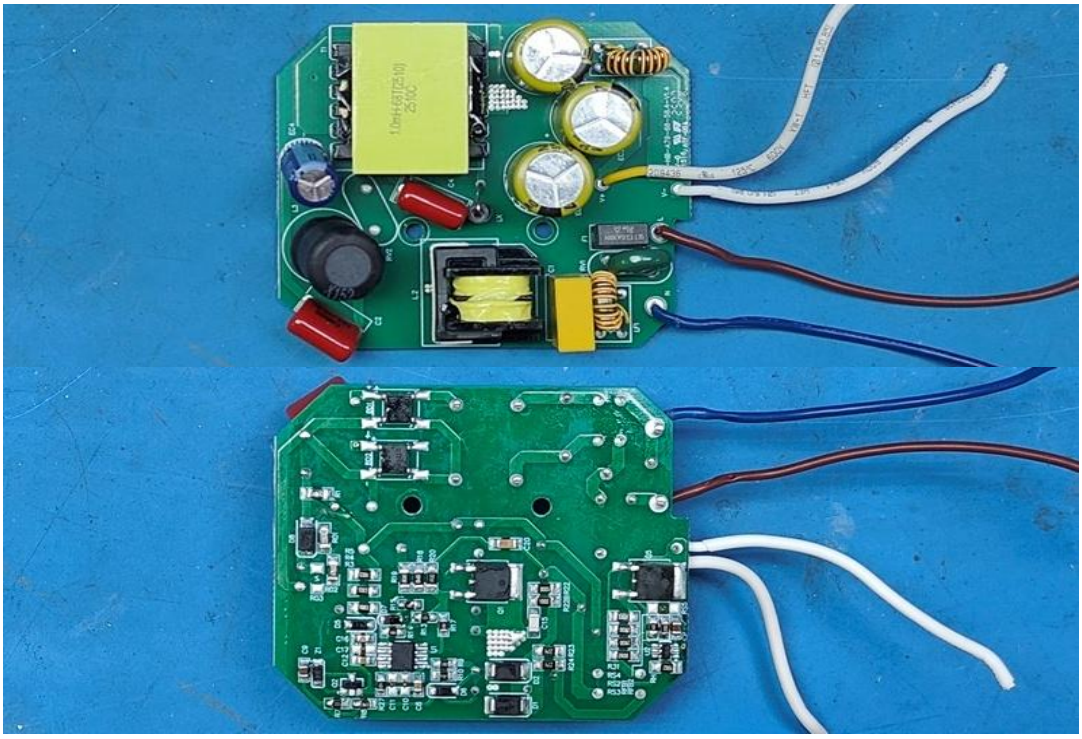
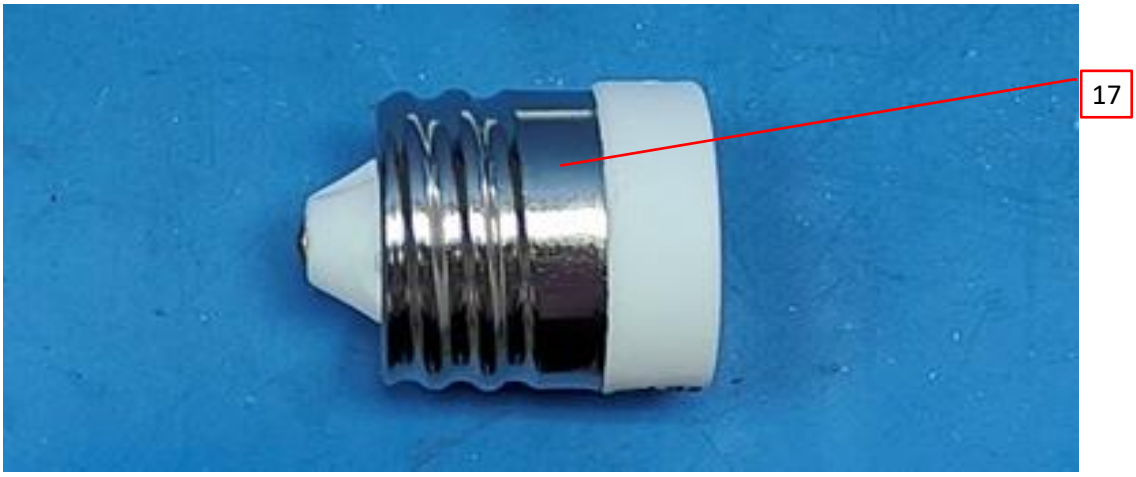


Photo 12 - Alternate LED driver view of model PVLB-28CM-30W&#-xxK, with strobing circuit



3.0 Product Photographs

Photo 13 - Lampholder adapter view of model PVLB-38CM-50W&#-xxK



4.0 Critical Components						
Photo #	Item no.[1]	Name	Manufacturer/ trademark[2]	Type / model[2]	Technical data and securement means	Mark(s) of conformity [3]
1	1	E26 screw base	Various	E26	Screw base, Aluminum or copper alloy electroplated with nickel alloy covering all surfaces, min. thickness 0.28mm. Comply with UL 496 and CSA C22.2#43. Refer to sec. 7.0 Ill. 5 for dimension drawing.	NR
1	2	Plastic housing	NANTONG ZHONGLAN ENGINEERING PLASTICS CO LTD	403M-G(xx)	PBT material, V-0, RTI 130°C, HWI=2, HAI=0, CTI=2, min. 1.1mm thickness.	cURus
1	3	Metal housing	Various	Various	Sheet aluminum metal, min. 0.81mm thickness. Secured to plastic housing by screws.	NR
2	4	Diffuser	CGN JUNER NEW MATERIALS CO.,LTD.	C2F(m)(f1)	PC material, V-0, 120°C, min. thickness 0.8mm. Secured to metal housing by adhesive.	cURus
4	5	LEDs	Various	Various	Vf: 2.8-3.1Vdc, If: max. 60mA. 2835 type.	NR
4	6	LED PCB	Various	Various	Metal base, V-0, 130°C, min. thickness 1.0mm, complied with UL 796.	cURus
4	7	Glue	Various	Various	Silicone, min. HB, min. 80°C. Used to secured the lead wire on the LED PCB.	UR
8	8	Adhesive	XIAMEN JINTAIXIANG NEW SCIENCE & TECHNOLOGY CO LTD	JTX-5195M	V-0, 105°C. Used to secured the diffuser and LED PCB on the metal housing.	cURus
9	9	Internal wire -1	Various	Various	AWM, min. 24AWG, min. 300Vac, min. 105ºC. Serve as supply lead wire.	cURus
9	10	Internal wire -2	Various	Various	AWM, min. 24AWG, min. 300Vac, min. 150ºC. Serve as LED lead wire.	cURus
9	11	Heat-shrinkable tube	Various	Various	Min. 300V, min. 125°C, VW-1. Used to fully covered the LED lead wire.	cURus
9	12	Fuse	XIAMEN SET ELECTRONICS CO LTD	SPT478	300V, T3.15A.	cURus
			XC ELECTRONICS (SHENZHEN) CORP LTD	5TE	300V, T3.15A.	cURus
9	13	Varistor	Various	Various	SPD, Type 5, min. 175V, min. 125 °C.	cURus
9	14	X cap	Various	Various	X1 type, min. 310V, min. 100°C, max. 100nF.	cURus
9	15	Inductor	Various	EQ2518	0.55mH for model PVLB-38CM-50W&#-xxK; 1.0mH for model PVLB-28CM-30W&#-xxK.	NR

4.0 Critical Components

Photo #	Item no.[1]	Name	Manufacturer/ trademark[2]	Type / model[2]	Technical data and securement means	Mark(s) of conformity [3]
9	16	PCB	Various	Various	Plastic base, V-0, 130°C, min. thickness 1.0mm, complied with UL 796.	cURus
13	17	Lampholder adapter	Dongguan GGB Electric Co Ltd	LH2312D	E39-E26, 660 W, 600 V, suitable for damp locations.	cETLus
1	18	Labels (not shown)	Various	Various	Rated min. 80°C when attached on the plastic or metal surface. Complied with UL969.	UR

NOTES:

1) Not all item numbers are indicated (called out) in the photos, as their location is obvious.

2) “Various“ means any type, from any manufacturer that complies with the "Technical data and securement means" and meets the "Mark(s) of conformity" can be used.

3) Indicates specific marks to be verified, which assures the agreed level of surveillance for the component. "NR" - indicates Unlisted and only visual examination is necessary. "See 5.0" indicates Unlisted components or assemblies to be evaluated periodically refer to section 5.0 for details.

5.0 Critical Unlisted CEC Components

No Unlisted CEC components are used in this report.

6.0 Critical Features

Recognized Component - A component part, which has been previously evaluated by an accredited certification body with restrictions and must be evaluated as part of the basic product considering the restrictions as specified by the Conditions of Acceptability.

Listed Component - A component part, which has been previously Listed or Certified by an accredited Certification Organization with no restrictions and is used in the intended application within its ratings.

Unlisted Component - A part that has not been previously evaluated to the appropriate designated component standard. It may also be a Listed or Recognized component that is being used outside of its evaluated Listing or component recognition.

Critical Features/Components - An essential part, material, subassembly, system, software, or accessory of a product that has a direct bearing on the product's conformance to applicable requirements of the product standard.

Construction Details - For specific construction details, reference should be made to the photographs and descriptions. All dimensions are approximate unless specified as exact or within a tolerance. In addition to the specific construction details described in this Report, the following general requirements also apply.

1. Spacing - In primary circuits and LED PCB, 2.4 mm minimum spacing are maintained through air and over surfaces of insulating material between current-carrying parts of opposite polarity and between such current-carrying parts and accessible metal part.
2. Mechanical Assembly - Components such as switches, fuseholders, connectors, wiring terminals and display lamps are mounted and prevented from shifting or rotating by the use of lockwashers, starwashers, or other mounting format that prevents turning of the component.
3. Corrosion Protection - All ferrous metal parts are protected against corrosion by painting, plating or the equivalent.
4. Accessibility of Live Parts - All uninsulated live parts in primary circuitry are housed within a non-metallic enclosure constructed with no openings other than those specifically described in Sections 4 and 5.
5. Grounding - This product is not provided with a means of grounding as it is not required to be grounded since no accessible metal parts that could be energized.
6. Polarized Connection - This product is provided with a polarized power supply connection. The lead wire of fusing resistor is connected to the eyelet of the center contact of the device.
7. Internal Wiring - Internal wiring is routed away from sharp or moving parts. Internal wiring leads terminating in soldered connections are made mechanically secure prior to soldering. Recognized Component separable (quick disconnect) connectors of the positive detent type, closed loop connectors, or other types specifically described in the text of this report are also acceptable as internal wiring terminals. At points where internal wiring passes through metal walls or partitions, the wiring insulation is protected against abrasion or damage by plastic bushings or grommets. All wiring is minimum 24AWG, with a minimum rating of 300V, 105°C.
8. Schematics - Refer to Illustration 2, 3, 4, 5 for schematics requiring verification during Field Representative Inspection Audits.
9. Markings - The marking is marked on a labeling system as described in item no. 18 of Section 4.0 on enclosure as follows:
   a) Applicant's name;
   b) Model number;
   c) Date marking;
   d) Electrical ratings (voltage, frequency, current, wattage)
   e) Factory ID

   Remark:
   -- Marking a) to e) marked in Format S13L1.
   -- Format S_L_ refer to Illustration 1 of Section 7.0.

6.0 Critical Features

10. Cautionary Markings - The product is marked by laser printing on the plasitc enclosure as follows:

    a) SUITABLE FOR DAMP LOCATIONS
    b) DO NOT USE WITH DIMMERS
    c) NOT FOR USE IN TOTALLY ENCLOSED LUMINAIRES or NOT FOR TOTALLY ENCLOSED LUMINAIRES

    Remark:
    -- Marking a) to c), Verbatim or Symbol, marked in Format S13L1.
    -- Format S_L_ refer to Illustration 1 of Section 7.0.

11. Installation, Operating and Safety Instructions - Instructions for installation and use of this product are provided by the manufacturer.

    d) THIS DEVICE IS NOT INTENDED FOR USE WITH EMERGENCY EXITS or NOT FOR EMERGENCY LIGHTING

    Remark:
    -- Marking d), marked in Format L2.
    -- Format S_L_ refer to Illustration 1 of Section 7.0.

12. Logo Dependent Marking - The required marking is dependent on the specific ETL logo applied to the product as authorized by the Authorization to Mark. In addition to the required marking of items 9, 10 and 11 above, all products bearing the cETLus and cETL logo will be marked with the following:

    a) CONVIENT AUX EMPLACEMENTS HUMIDES
    b) NE PAS UTILISER AVEC DES GRADATEURS
    c) NE CONVIENT PAS À DES LUMINAIRES TOTALEMENT FERMÉS
    d) ESTE DISPOSITIVO NO SE DESTINA PARA USO EN SALIDAS DE EMERGENCIA ou NE PAS POUR L ’ÉCLAIRAGE DE SECOURS

    Remark:
    -- Marking a) to c), Verbatim or Symbol, marked in Format S13L1.
    -- Marking d), marked in Format L2.
    -- Format S_L_ refer to Illustration 1 of Section 7.0.

7.0 Illustrations

Illustration 1 - The requirement for Format S_ L _

Format minimum size designations for marking height and type face

Size designation	Letter height	Font size	Font type face uppercase
S13	1.3 (0.051)	5	Universal bold Arial bold Helvetica bold Zurich BT bold Sans Serif
S20	2.0 (0.079)	7.5	
S28	2.8 (0.110)	11	

Format location designation for marking

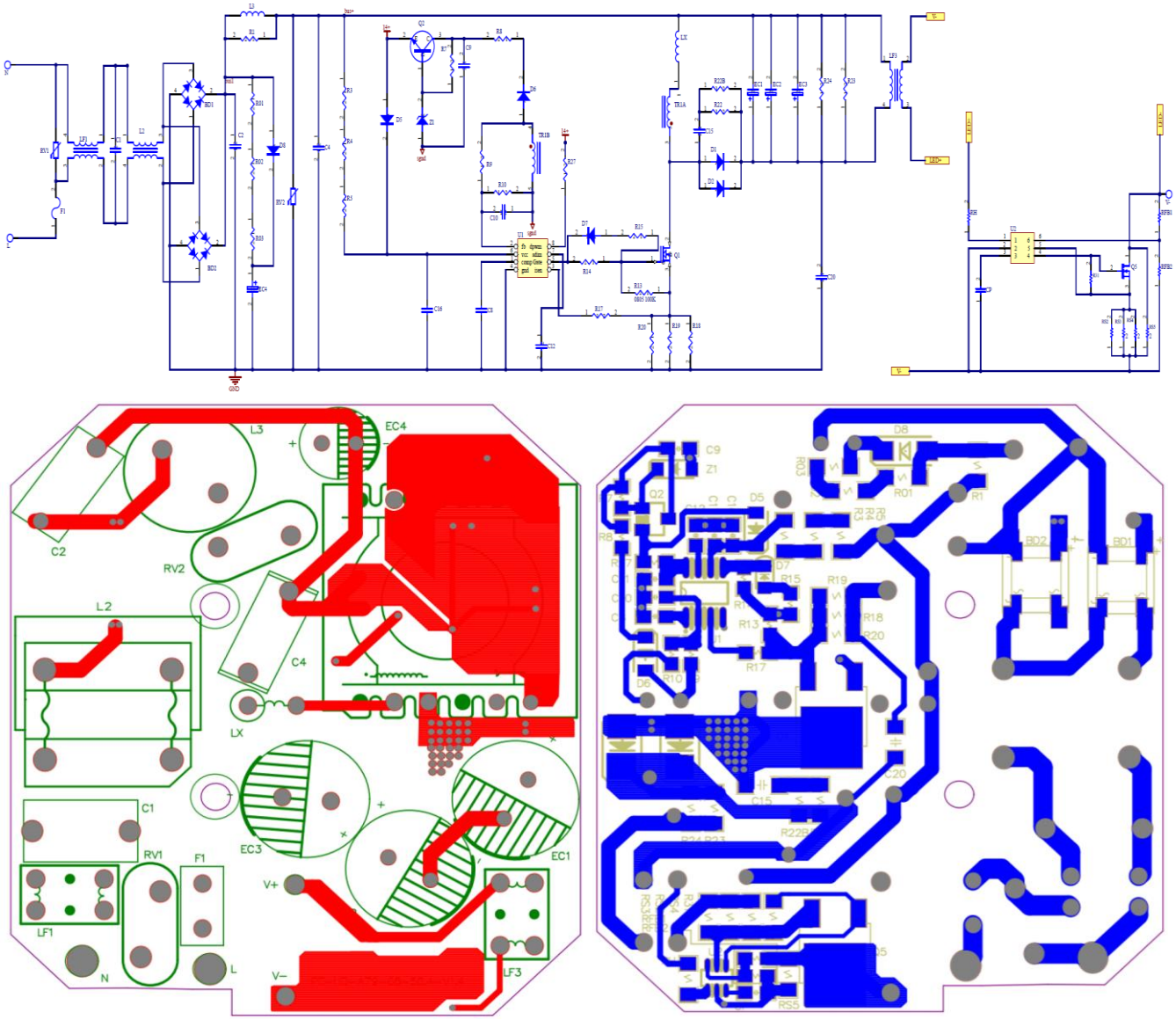
Location designation	Description	Marking
L1	On the product	Type P
L2	On smallest unit packaging, point-of-sale package, carton, or instruction sheet	Type T

Notes:
Type P designates a permanent marking that is intended to remain in the applied position for the lifetime of the device under conditions of normal use. It provides information required for the user maintenance over the expected life of the device. If a label is used, it must be made of material that complies with CSA C22.2 No. 0.15 or UL 969.

Type T designates a temporary label, instruction sheet, or tag that provides installation instruction and information not required after installation. It is made of printed matter with or without attachment to the device.

7.0 Illustrations

Illustration 2 - Circuit diagram and PCB layout for models PVLB-38CM-50W&#-xxK, PVLB-28CM-30W&#-xxK



7.0 Illustrations

Illustration 3 - LED PCB layout for model PVLB-38CM-50W&#-xxK

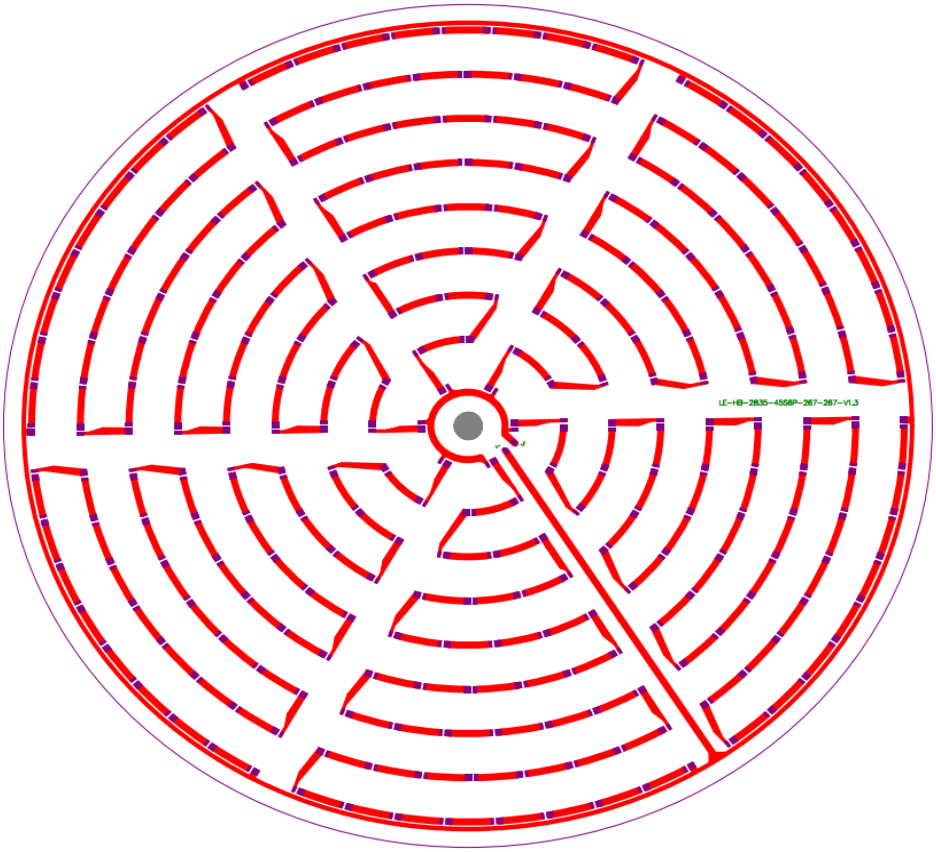
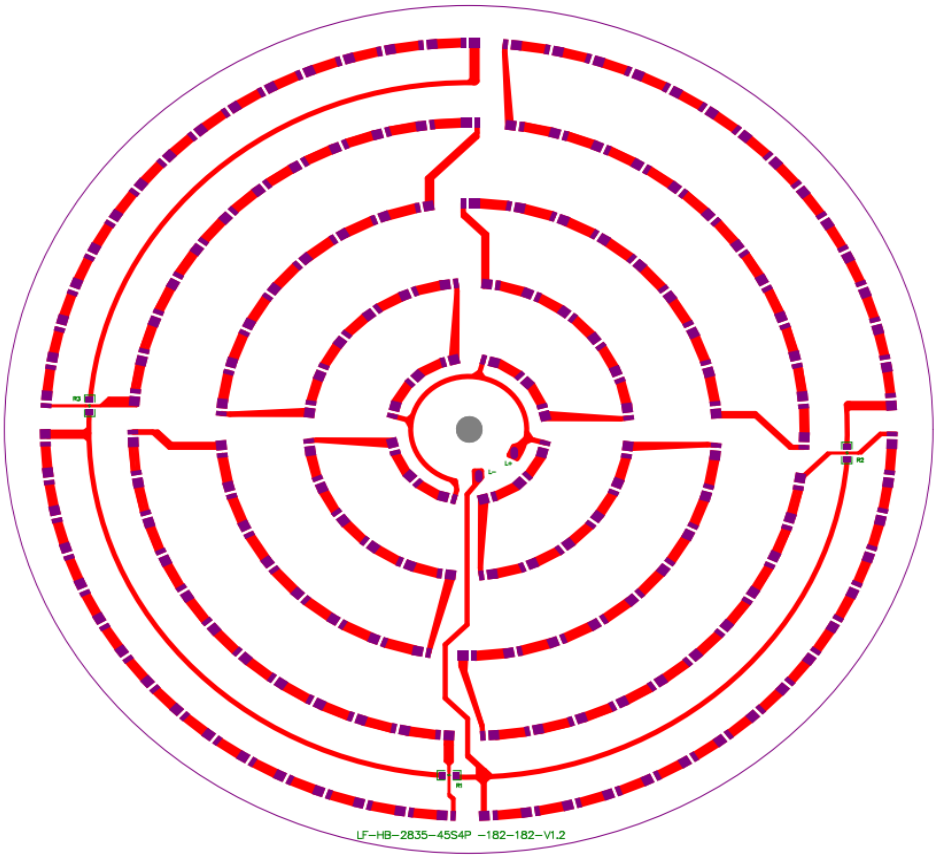
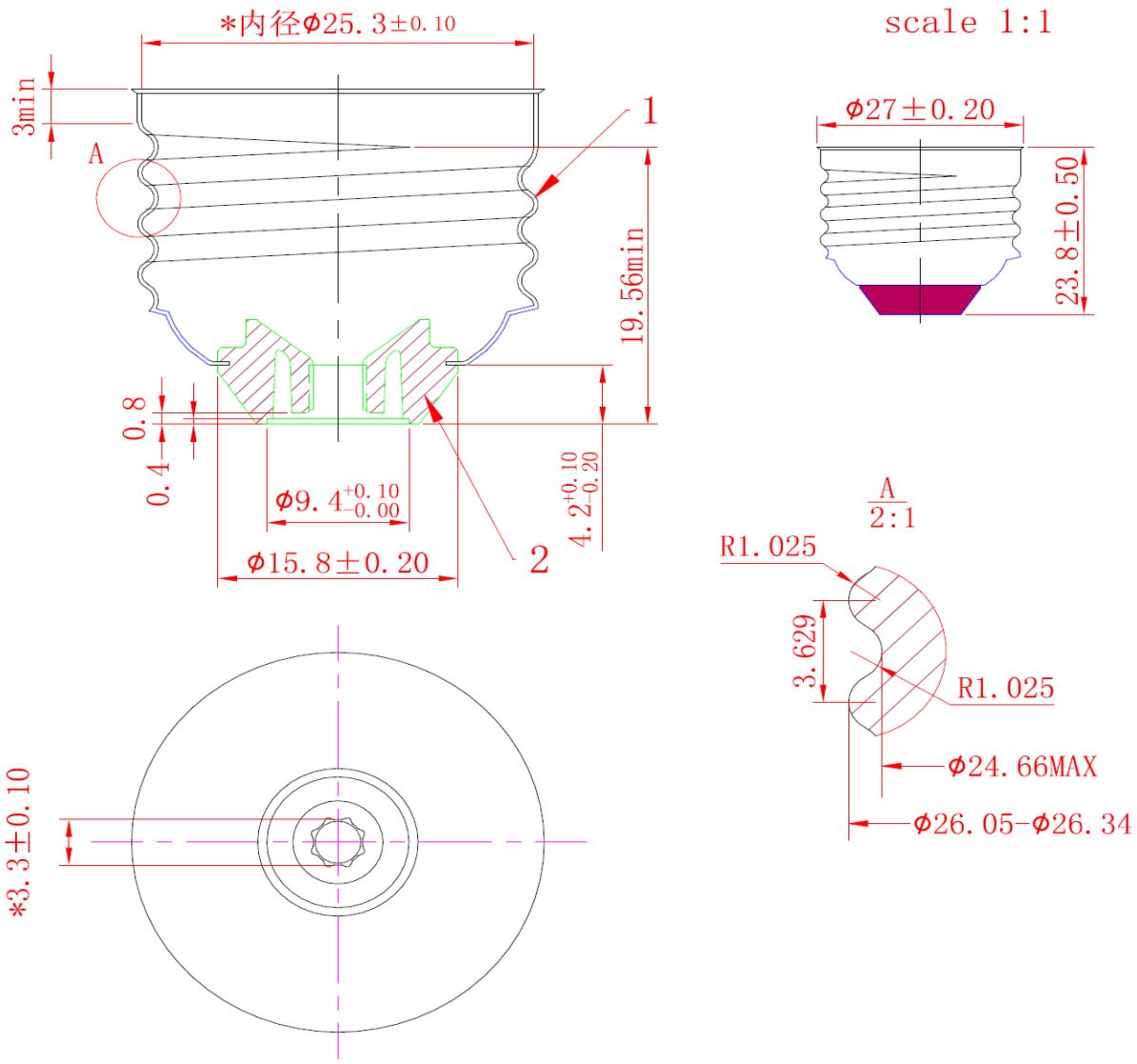


Illustration 4 - LED PCB layout for model PVLB-28CM-30W&#-xxK



7.0 Illustrations

Illustration 5 - Dimension drawing of E26 screw base



8.0 Test Summary					
Evaluation Period	8-Apr-2025 to 6-May-2025			Project No.	250408173GZU
Sample Rec. Date	8-Apr-2025	Condition	Prototype	Sample ID.	S250408173-001~012
Test Location	Intertek Testing Services Shenzhen Ltd. Guangzhou Branch Room 101/301/401/102/202/302/402/502/602/702/802, No. 7-2, Caipin Road, Huangpu District, Guangzhou, Guangdong, China				
Test Procedure	Testing Lab				
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.					
The following tests were performed:					

Test Description	UL 1993:2024 Ed.6 and CSA C22.2#1993:2024 Ed.4 /Clause
Weight and moment	5.4, A5.4
Lamp bases and lampholders	6.1, A6.1
Input measurements	8.2, A8.2
Temperature test	8.5, A8.5
Dielectric voltage-withstand test	8.6, A8.6
Drop impact test	8.8, A8.8
Mold-stress relief conditioning	8.9, A8.9
Deflection test	8.10, A8.10
Tests of dimmer circuits	8.13, A8.12
Humidity conditioning	8.14, A8.13
LED lamps - current cascade abnormal	A8.25

Test Description	UL 496:2017 Ed.14+R:28Mar2022 and CSA C22.2#43:2017 Ed.14+U1 /Clause
Mechanical strength of screwshell and screw base	5.2.3
Screwshell and screw base conformity tests - Go / Not Go	5.2.4

Test Description	UL 8750:2015 Ed.2+R:01Aug2024 /Clause	CSA C22.2#250.13:2022 Ed.5 /Clause
Input test	8.2	9.2
Temperature test	8.3	9.3
Dielectric voltage withstand test	8.6	9.4
Abnormal tests	8.7.2	9.5.2
Adhesive support test	8.13	9.11

8.1 Signatures			
A representative sample of the product covered by this report has been evaluated and found to comply with the applicable requirements of the standards indicated in Section 1.0.			
Completed by:	William Chen	Reviewed by:	Gerry Wu
Title:	Engineer	Title:	Reviewer
Signature:		Signature:	

9.0 Correlation Page For Multiple Listings	
The following products, which are identical to those identified in this report except for model number and Listee name, are authorized to bear the ETL label under provisions of the Intertek Multiple Listing Program.	
BASIC LISTEE	XIAMEN PVTECH CORPORATION LTD.
Address	No.200 Middle Neian Road, XIAMEN Fujian 361101
Country	China
Product	Self-ballasted LED lamps

MULTIPLE LISTEE 1	None
Address	
Country	
Brand Name	
ASSOCIATED MANUFACTURER	
Address	
Country	

MULTIPLE LISTEE 1 MODELS	BASIC LISTEE MODELS

MULTIPLE LISTEE 2	None
Address	
Country	
Brand Name	
ASSOCIATED MANUFACTURER	
Address	
Country	

MULTIPLE LISTEE 2 MODELS	BASIC LISTEE MODELS

MULTIPLE LISTEE 3	None
Address	
Country	
Brand Name	
ASSOCIATED MANUFACTURER	
Address	
Country	

MULTIPLE LISTEE 3 MODELS	BASIC LISTEE MODELS

10.0 General Information

The Applicant and Manufacturer have agreed to produce, test and label ETL Listed products in accordance with the requirements of this Report. The Manufacturer has also agreed to notify Intertek and to request authorization prior to using alternate parts, components or materials.

COMPONENTS

Components used shall be those itemized in this Intertek report covering the product, including any amendments and/or revisions.

LISTING MARK

The ETL Listing mark applied to the products shall either be separable in form, such as labels purchased from Intertek, or on a product nameplate or other media only as specifically authorized by Intertek. Use of the mark is subject to the control of Intertek.

The mark must include the following four items:

1) applicable country identifiers "US" and/or "C" or "US", "C" and "EU"
2) the word "Listed" or "Classified" or "Recognized Component" (whichever is appropriate)
3) a control number issued by Intertek
4) a product descriptor that identifies the standards used for certification. Example:

For US standards, the words, “Conforms to” shall appear with the standard number along with the word, “ Standard” or “Std.” Example: “Conforms to ANSI/UL Std. XX.”

For Canadian standards, the words “Certified to CAN/CSA Standard CXX No. XX.” shall be used, or abbreviated, “Cert. to CAN/CSA Std. CXX No. XX.”

Can be used together when both standards are used.

If all standards on the ATM have the same standard title, the shared title or its abbreviation may be used in place of the examples above. Example: "Medical Electrical Equipment" or "MEE"; "Information Technology Equipment" or "ITE"; "Audio/Video Information And Communication Technology Equipment" or "A/V ICTE".

Note: A facsimile must be submitted to Intertek, Attn: Follow-up Services for approval prior to use. The facsimile need not have a control number. A control number will be issued **after signed Certification Agreements** have been received by the Follow-up Services office, approval of the facsimile of your proposed Listing Mark, satisfactory completion of the Listing Report, and scheduling of a factory assessment in your facility.

MANUFACTURING AND PRODUCTION TESTS

Manufacturing and Production Tests shall be performed as required in this Report.

FOLLOW-UP SERVICE

Periodic unannounced audits of the manufacturing facility (and any locations authorized to apply the mark) shall be scheduled by Intertek. An audit report shall be issued after each visit. Special attention will be given to the following:

1. Conformance of the manufactured product to the descriptions in this Report.
2. Conformance of the use of the ETL mark with the requirements of this Report and the Certification Agreement.
3. Manufacturing changes.
4. Performance of specified Manufacturing and Production Tests.

In the event that the Intertek representative identifies non-conformance(s) to any provision of this Report, the Applicant shall take one or more of the following actions:

1. Correct the non-conformance.
2. Remove the ETL Mark from non-conforming product.
3. Contact the issuing product safety evaluation center for instructions.

10.1 Evaluation of Unlisted Components

Because Unlisted Components are uncontrolled, and they do not fall under a third party follow up program, Intertek may require these components to be tested and/or evaluated at least once annually, more often for certain components, as part of the independent certification process. The Unlisted Components in Section 5.0 require testing and/or evaluation as indicated.

The Applicant will be notified, in writing, via the applicable contact methods, as defined in Section 1.0, when these components must be selected and sent to Component Evaluation Center (CEC) for re-evaluation.

Due to particular testing requirements, some components may be requested to be shipped to specific labs. Thus, specific shipment destination(s) for each sample will be provided in the written notification.

Managing CEC Location:
Intertek Testing Services Shenzhen Limited Guangzhou Branch
ETL Component Evaluation Center
Room 101/301/401/102/202/302/402/502/602/702/802, No. 7-2, Caipin Road, Huangpu District
Guangzhou, Guangdong, China
Attn: Ms. Joey Kuang
Sample Disposition: Due to the destructive nature of the testing, all samples will be discarded at the conclusion of testing unless, the manufacturer specifically requests the return of the samples. The request for return must accompany the initial component shipment.

11.0 Manufacturing and Production Tests

The manufacturer agrees to conduct the following Manufacturing and Production Tests as specified:

Required Tests

Dielectric Voltage Withstand Test

11.1 Dielectric Voltage Withstand Test

The device may be in a heated or unheated condition for the test.

The test shall be conducted when the device is fully assembled. It is not intended that the product be unwired, modified, or disassembled for the test.

The test may be performed before final assembly if the test represents the completed product.

A device employing a solid-state component that is not relied upon to reduce a risk of electric shock and that can be damaged by the dielectric potential may be tested before the component is electrically connected provided that a random sampling of each day's production is tested at the potential specified in Table J.1 or Table J.2. The circuitry may be rearranged for the purpose of the test to reduce the likelihood of solid-state component damage while retaining representative dielectric stress of the circuit.

The test equipment shall include a transformer having an essentially sinusoidal output, a means of indicating the test potential, an audible or visual indicator of electrical breakdown, and either a manually reset device to restore the equipment after electrical breakdown or an automatic reject feature for any unacceptable unit.

If the output of the test equipment transformer is less than 500 VA, the equipment shall include a voltmeter in the output circuit to directly indicate the test potential.

If the output of the test equipment transformer is 500 VA or larger, the test potential may be indicated:

a) By a voltmeter in the primary circuit or in a tertiary-winding circuit,

b) By a selector switch marked to indicate the test potential, or

c) For equipment having a single test-potential output, by a marking in a readily visible location to indicate the test potential. When marking is used without an indicating voltmeter, the equipment shall include a positive means, such as an indicator lamp, to indicate that the manually reset switch has been reset following a dielectric breakdown.

Test equipment other than that described above may be used if found to accomplish the intended factory control.

A 500 V dc insulation resistance test can be considered representative of the dielectric voltagewithstand test and may be used as an alternative method.

The insulation resistance measurement of below shall be made using a dc insulation tester capable of delivering the appropriate open circuit voltage (i.e., 500 V dc), or other suitable equipment. The test voltage should be applied for a minimum duration of 1 s. The measured resistance shall not be less than 2 M. For safety reasons, the test should be performed with the device disconnected from the power supply.

Test records shall be retained for a period of at least six months, and shall include the name of the tests performed, test quantity, test dates, catalog or model numbers, test results, and disposition of any non-complying products.

Products Requiring Dielectric Voltage Withstand Test:

Each device shall withstand without electrical breakdown, as a routine production-line test, the application of a potential between current-carrying parts of the supply circuit and accessible non-current-carrying metal as indicated in Table J.1. Table J.2.

Table J.1

Production-Line Test Conditions for 120 Volt Rated Lamps

Condition	Application time, seconds	Applied potential, volts	
		40 – 70 Hz	DC
A	60	1240	1754
B	1	1488	2104

Table J.2

Production-Line Test Conditions for Lamps Rated Greater Than 120 Volts

Condition	Application time, seconds	Applied Potential, volts	
		40 – 70 Hz	DC
A	60	2V+1000	(2V+1000)*1.414
B	1	(2V+1000)*1.2	(2V+1000)*1.697

The production-line test shall be in accordance with either condition A or B of Table J.1 or Table J.2.

12.0 Revision Summary

The following changes are in compliance with the declaration of Section 8.1:

Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
				None