



File E526287

Vol X1

Authorization Page 1

Issued: 2022-04-14

Revised: 2022-04-14

FOLLOW-UP SERVICE PROCEDURE
(TYPE R)

POWER SUPPLIES FOR USE WITH AUDIO/VIDEO, INFORMATION AND COMMUNICATION TECHNOLOGY EQUIPMENT
(QQJQ, QQJQ7)

Manufacturer:	SEE ADDENDUM FOR MANUFACTURER LOCATIONS
Applicant:	2771267 (Party Site) Shenzhen Filmbase Technology Co Ltd 31f, 3a Building Smart Park Baolong, Longgang Shenzhen GUANGDONG 518116 CN
Listee/Classified Company:	2771267 (Party Site) SAME AS APPLICANT

Use of the Mark

This Follow-Up Service Procedure authorizes the above Manufacturer(s) to use the marking specified by UL LLC, or any authorized licensee of UL LLC, including the UL Contracting Party, only on products when constructed, tested and found to be in compliance with the requirements of this Follow-Up Service Procedure and in accordance with the terms of the applicable service agreement with UL Contracting Party. The UL Contracting Party for Follow-Up Services is listed in the addendum to this Follow-Up Service Procedure ("UL Contracting Party"). UL Contracting Party and UL LLC are referred to jointly herein as "UL."

It is the responsibility of the Applicant, Manufacturer(s), and Listee/Classified Company to make sure that only the products meeting the aforementioned requirements bear the authorized Marks of UL LLC, or any authorized licensee of UL LLC.

Additional Responsibilities

Additional responsibilities, duties and requirements for the Applicant and Manufacturers are defined under Additional Resources at the following web-site: <http://www.ul.com/fus>. Manufacturers without Internet access may obtain the current version of these documents from their local UL customer service representative or UL field representative. For assistance, or to obtain a paper copy of these documents or the Follow-Up Service Terms referenced below, please contact UL's Customer Service at <http://www.ul.com/aboutul/locations/>, select a location and enter your request, or call the number listed for that location.

Acceptance of Follow-Up Services

The Applicant and the specified Manufacturer(s) and any Listee/Classified Company in this Follow-Up Service Procedure must agree to receive Follow-Up Services from UL Contracting Party. If your applicable service agreement is a Global Services Agreement ("GSA"), the Applicant, the specified Manufacturer(s), and any Listee/Classified Company will be bound to a Service Agreement for Follow-Up Services upon the earliest by any Subscriber of a) use of the prescribed UL Mark, b) acceptance of the factory inspection, or c) payment of the Follow-Up Service fees. The Service Agreement incorporates such GSA, this Follow-Up Service Procedure and the Follow-Up Service Terms which can be accessed by clicking the following link: <http://services.ul.com/fus-service-terms>. In all other events, Follow-Up Services will be governed by and incorporate the terms of your applicable service agreement and this Follow-Up Service Procedure.

Use and Ownership of the Follow-Up Service Procedure

This Follow-Up Service Procedure, and any subsequent revisions, is the property of UL and is not transferable. This Follow-Up Service Procedure contains confidential information for use only by the Applicant, the specified Manufacturer(s), and representatives of UL and is not to be used for any other purpose. It is provided to the Subscribers with the understanding

that it is not to be copied, either wholly or in part unless specifically allowed, and that it will be returned to UL, upon request.

Definition of Terms

Capitalized terms used but not defined herein have the meanings set forth in the GSA and the applicable Service Terms or any other applicable UL service agreement.

No Third Party Liability

UL shall not incur any obligation or liability for any loss, expense or damages, including incidental, consequential or punitive damages arising out of or in connection with the use or reliance upon this Follow-Up Service Procedure to anyone other than the above Manufacturer(s) as provided in the agreement between UL LLC or an authorized licensee of UL LLC, including UL Contracting Party, and the Manufacturer(s).

Certification Body

UL LLC has signed below solely in its capacity as the certification body to indicate that this Follow-Up Service Procedure fulfills the requirements for certification documentation issued by the certification body.

Bruce A. Mahrenholz
Director
Conformity Assessment Programs (CPO)
UL LLC

LOCATION

2811479 (Party Site)
Shenzhen Yuguang New Material Co Ltd
202 Room 2F, Building 3, Huaqiang Logistics Industrial Park
Qingfeng Road, Baolong Community, Longgang District
Shenzhen Guangdong 518015 CN

Factory ID: NONE

UL Contracting Party for above site is: UL GmbH

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<u>Product Type</u>	<u>Model/Type Reference</u>	<u>Report Reference #</u>	<u>Status</u>
PDLC Film, Smart glass, Transformer	FB-03-20-60V	E526287-A6001-UL	

CERTIFICATE OF COMPLIANCE

Certificate Number UL-CA-2213604-0
Report Reference E526287-20220414
Date 18-Apr-2022

Issued to: Shenzhen Filmbase Technology Co Ltd
31f, 3a Building Smart Park Baolong, Longgang Shenzhen,
GUANGDONG 518116
China

**This is to certify that
representative samples of**

QQJQ7 - Power Supplies for Use with Audio/Video,
Information and Communication Technology Equipment
Certified for Canada
See Addendum Page for Product Designation(s).

Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

Standard(s) for Safety: CSA C22.2 NO. 62368-1-14, 2nd Ed., Issue Date: 2014-12-01

Additional Information: See the UL Online Certifications Directory at
<https://iq.ulprospector.com> for additional information

This Certificate of Compliance does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program

UL LLC

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CERTIFICATE OF COMPLIANCE

Certificate Number UL-CA-2213604-0
Report Reference E526287-20220414
Date 18-Apr-2022

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

Model	Category Description
FB-03-20-60V	PDLC Film, Smart glass, Transformer



Bruce Mahrenholz, Director North American Certification Program

UL LLC

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CERTIFICATE OF COMPLIANCE

Certificate Number UL-US-2214282-0
Report Reference E526287-20220414
Date 18-Apr-2022

Issued to: Shenzhen Filmbase Technology Co Ltd
31f, 3a Building Smart Park Baolong, Longgang Shenzhen,
GUANGDONG 518116
China

**This is to certify that
representative samples of** QQJQ - Power Supplies for Use with Audio/Video,
Information and Communication Technology Equipment
See Addendum Page for Product Designation(s).

Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 62368-1, 2nd Ed., Issue Date: 2014-12-01

Additional Information: See the UL Online Certifications Directory at
<https://iq.ulprospector.com> for additional information

This Certificate of Compliance does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program

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CERTIFICATE OF COMPLIANCE

Certificate Number UL-US-2214282-0
Report Reference E526287-20220414
Date 18-Apr-2022

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

Model	Category Description
FB-03-20-60V	PDLC Film, Smart glass, Transformer



Bruce Mahrenholz, Director North American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



UL TEST REPORT AND PROCEDURE

Standard:	UL 62368-1, 2nd Ed, 2014-12-01 (Audio/video, information and communication technology equipment Part 1: Safety requirements) CAN/CSA C22.2 No. 62368-1-14, 2nd Ed, Issued: 2014-12-01 (Audio/video, information and communication technology equipment Part 1: Safety requirements)
Certification Type:	Listing
CCN:	QQJQ, QQJQ7 (Power Supplies for Use in Audio/Video, Information and Communication Technology Equipment)
Complementary CCN:	N/A
Product:	PDLC Film, Smart glass, Transformer
Model:	FB-03-20-60V
Rating:	Input: 110-120Vac , 50/60Hz, 0.6A Output: 60Vac, 0.83A (max.)
Applicant Name and Address:	Shenzhen Filmbase Technology Co., Ltd. 31F, 3A Building, Smart Park, Baolong, Longgang, Shenzhen, 518116, China

This is to certify that representative samples of the products covered by this Test Report have been investigated in accordance with the above referenced Standards. The products have been found to comply with the requirements covering the category and the products are judged to be eligible for Follow-Up Service under the indicated Test Procedure. The manufacturer is authorized to use the UL Mark on such products which comply with this Test Report and any other applicable requirements of UL LLC ('UL') in accordance with the Follow-Up Service Agreement. Only those products which properly bear the UL Mark are considered as being covered by UL's Follow-Up Service under the indicated Test Procedure.

The applicant is authorized to reproduce the referenced Test Report provided it is reproduced in its entirety.

UL authorizes the applicant to reproduce the latest pages of the referenced Test Report consisting of the first page of the Specific Technical Criteria through to the end of the Conditions of Acceptability.

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL.

Prepared By: KinSang Tang / Project Handler Reviewed By: Paul Wan / Project Reviewer

Supporting Documentation

The following documents located at the beginning of this Procedure supplement the requirements of this Test Report:

A. Authorization - The Authorization page may include additional Factory Identification Code markings.

B. Generic Inspection Instructions -

- i. Part AC details important information which may be applicable to products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of this Test Report.
- ii. Part AE details any requirements which may be applicable to all products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of each Test Report.
- iii. Part AF details the requirements for the UL Certification Mark which is not controlled by the technical standard used to investigate these products. Products are permitted to bear only the Certification Mark(s) corresponding to the countries for which it is certified, as indicated in each Test Report.

Product Description

1. This PDLC Film, Smart glass, Transformer , Model FB-03-20-60V is equipped with class II construction, which is designed to supply power for PDLC Film and Smart glass and suitable for indoor use only.
2. The equipment's top enclosure is secured to the bottom enclosure by buckles.
3. The test samples are pre-production sample without serial numbers.
4. The sample was submitted and evaluated for use at the specified maximum ambient temperature (Tma) 50°C.
5. The equipment was evaluated for a maximum operating altitude of 2000m.
6. Functional insulation is kept between input (ES3)circuits and output (ES3) circuits.
7. The equipment's load can be PDLC film, Smart glass or resistive load.
8. The conductive parts inside output connector cannot be accessible by test probe in annex V of UL62368-1

Model Differences

N/A

Test Item Particulars

Classification of use by	Ordinary person Children likely to be present
Supply Connection	AC Mains
Supply % Tolerance	+10%/-10%
Supply Connection – Type	pluggable equipment type A - appliance coupler
Considered current rating of protective device as part of building or equipment installation	20 A; building;
Equipment mobility	movable transportable wall-mounted
Over voltage category (OVC)	OVC II
Class of equipment	Class II
Access location	N/A
Pollution degree (PD)	PD 2
Manufacturer's specified maximum operating ambient (°C)	50

IP protection class	IPX0
Power Systems	TN
Altitude during operation (m)	2000 m or less
Altitude of test laboratory (m)	2000 m or less
Mass of equipment (kg)	Approx.: 0.91

Technical Considerations

- ☐ The product was submitted and evaluated for use at the maximum ambient temperature (T_{ma}) permitted by the manufacturer's specification of : 50°C
- ☐ The product is intended for use on the following power systems : TN
- ☐ Considered current rating of protective device as part of the building installation (A) : 20
- ☐ Mains supply tolerance (%) or absolute mains supply values : +10%/-10%
- ☐ The equipment disconnect device is considered to be : Appliance inlet
- ☐ The following are available from the Applicant upon request : Installation (Safety) Instructions / Manual
- ☐ The product was investigated to the following additional standard : CSA CAN/CSA-C22.2 NO. 62368-1 2nd Ed, Issued December 1, 2014

Additional Information

N/A

Additional Standards

The product fulfills the requirements of: CSA CAN/CSA-C22.2 No. 62368-1 2nd Edition, Issued December 1, 2014

Markings and Instructions

Clause Title	Marking or Instruction Details
Equipment identification marking – Manufacturer identification	Listee's or Recognized company's name, Trade Name, Trademark or File Number
Equipment identification marking – model identification	Model Number
Equipment rating marking – ratings	"Input Ratings (voltage, frequency/dc, current/power)", "Output Ratings (voltage, frequency/dc, current/power)"
Fuses – replaceable by skilled person	(component ID: __F1__), Ratings (3.15A), "Ratings (T3.15A/250V)", and (symbol of required characteristics) located on or adjacent to fuse or fuseholder or in service manual.
Class II Equipment without Functional Earth	Symbol for Class II construction  (IEC 60417-5172)

Mounting Height (in manual)	The equipment is only suitable for mounting at heights less than or equal to 2 meters.
Special Instructions to UL Representative [X] For transformer test - When the tests are conducted at other location, inspect test record and specification sheet provided by the component manufacturer. Verify the specification sheet indicates 100% routine test specified in Production-Line Testing Requirements be conducted at the component manufacturer.	

BD1.0	TABLE: Production-Line Testing Requirements					
BD1.1	Electric Strength Test Special Constructions – Refer to Generic Inspection Instructions, Part AC for further information.					
Model	Component	Removable parts	Test probe location	Test V rms	Test V dc	Test Time, s
All Models	Transformer	N/A	Primary to Secondary	2829Vrms	4000Vdc	Min. 1s
All models	EUT	N/A	Input to output	2829Vrms	4000Vdc	Min. 1s
BD1.2	Earthing Continuity Test Exemptions – This test is not required for the following models:					
	ALL Models					
BD1.3	Electric Strength Test Exemptions – This test is not required for the following models:					
	N/A					
BD1.4	Electric Strength Test Component Exemptions – The following solid-state components may be disconnected from the remainder of the circuitry during the performance of this test.					
	N/A					

BE1.0	Sample and Test Specifics for Follow-Up Tests at UL				
Model	Component	Material	Test	Sample (s)	Test Specifics
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4.1.2	TABLE: List of critical components					Pass
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Product Category CCN(s)	Mark(s) of conformity	Supplement ID
Marking Label	Interchangeable	Interchangeable	Suitable for use on each type of surface to which applied, rated for maximum surface temperature specified.	PGDQ2/ PGJ12	UL	
AC Inlet	LECI Electronics Co., LTD	DB-8	2.5A / 5A, 250VAC, 70°C	AXUT2/8	UL, CUL E302229	
AC Inlet -Alternate	ZHE JIANG BEI ER JIA ELECTRONIC CO LTD	ST-A03-005	2.5A / 5A, 250VAC, 70°C	AXUT2/8	UL, CUL E225980	
AC Inlet -Alternate	Yueqing Yanghui Electronics Co., Ltd	DB-14-T	2.5A, 250VAC, 70°C	AXUT2/8	UL, CUL E334847	
Plastic Material of enclosure	SABIC INNOVATIVE PLASTICS B V	SHF4910(GG)	V-0, 120°C, 1.5mm min. thickness, All color. See enclosure ID7-01 & ID7-05 for details.	QMFZ2/8	UL, CUL E45329	
PCB	ZHEJIANG ZAPON ELECTRONIC TECHNOLOGY CO LTD	Z-M	V-0; 130°C	ZPMV2/8	UL, CUL E253641	
PCB-Alternate	Interchangeable	Interchangeable	Min V-1, 130°C	ZPMV2/8	UL, CUL	
Current fuse (F1)	SHENZHEN LANSON ELECTRONICS CO LTD	SMT	250V AC; T3.15A	JDYX/7	UL, CUL E221465	
Current fuse (F1)-Alternate	Littelfuse Inc	392	250V AC; T3.15A	JDYX2/8	UL, CUL E67006	
Current fuse (F1)-Alternate	XC Electronics (shen zhen) Corp. LTD	5TE	250V AC; T3.15A	JDYX/7	UL, CUL E249609	

Current fuse (F1)- Alternate	DONGGUAN BETTER ELECTRONICS TECHNOLOGY CO LTD	932	250V AC; T3.15A	JDYX/7	UL, CUL E300003	
Current fuse (F1)- Alternate	CONQUER ELECTRONICS CO LTD	MET or MEF	250V AC; T3.15A	JDYX2/8	UL, CUL E82636	
Mylar sheet (placed under PCB)	JINGMEN GORUN TECHNOLOGY CO LTD	HF11	Min. 0.125mm, Min 80°C,V-0; Color: Natural (No pigmentation). See enclosure ID7-04 for details.	QMFZ2/8	UL, CUL E305163	
Strain relief means for output wire	SABIC INNOVATIVE PLASTICS B V	SHF4910(GG)	V-1 or better, 1.5mm min. thickness, 120°C See enclosure ID7-03 for its spec.	QMFZ2/8	UL, CUL E45329	
Output wire	Dongguan Jinlan Industry Co Ltd	2464	Min 24AWG; 300V; 80°C, VW-1, max. 3.05m in length, jacketed cable	AVLV2/8	UL, CUL E339790	
Output wire - Alternate	Shenzhen City De Xing Long Electric Co., Ltd.	2464	Min 24AWG; 300V; 80°C, VW-1, max. 3.05m in length, jacketed cable	AVLV2/8	UL, CUL E328945	
Output wire - Alternate	DONGGUAN CITY DHE WIRE & CABLE CO., LTD	2464	Min 24AWG; 300V; 80°C, VW-1, max. 3.05m in length, jacketed cable	AVLV2/8	UL, CUL E343712	
Output wire - Alternate	Dongguan Zhihe Electrical Cable Tech Co., LTD	2464	Min 24AWG; 300V; 80°C, VW-1, max. 3.05m in length, jacketed cable	AVLV2/8	UL, CUL E258239	

Output wire - Alternate	KWANG IL ELECTRIC WIRE CO LTD	2464	Min 24AWG; 300V; 80°C, VW-1, max. 3.05m in length, jacketed cable	AVLV2/8	UL, CUL E150633	
Output wire - Alternate	DONGGUAN TRIUMPHCABLE CO LTD	2464	Min 24AWG; 300V; 80°C, VW-1, max. 3.05m in length, jacketed cable 80°C	AVLV2/8	UL, CUL E249743	
Output wire - Alternate	Dongguan Wenchang Electronic Co., LTD	2464	Min 24AWG; 300V; 80°C, VW-1, max. 3.05m in length, jacketed cable	AVLV2/8	UL, CUL E214500	
Output wire - Alternate	GUANGDONG DONGJU WIRE & CABLE CO LTD	SVT, SJT, ST, SJTW	Min 24AWG; 300V; 105°C, VW-1, max. 3.05m in length, jacketed cable	ZJCZ/7	UL, CUL E189672	
Output wire - Alternate	KAI TAT INDUSTRIES CO	SVT, SJT, ST, SJTW	Min 24AWG; 300V; 105°C, VW-1, max. 3.05m in length, jacketed cable	ZJCZ/7	UL, CUL E246527	
Output connectors	SHENZHEN LINKO ELECTRIC CO LTD	LC-20-C03PE-01-001	Rated 250V, 3A 105°C, V-0. See UL test reference ID9-03 for details.	ECBT2/8	UL, CUL E365869	
Transformer (T1)	JANOHIG ELECTRONICS TECHNOLOGY CO., LTD	YG6625-50W	Class 130 (B). See UL test reference ID9-01 for details.	-	Tested with appliance	
- Insulation system	JANOHIG ELECTRONICS TECHNOLOGY CO., LTD	YCI-130	Class 130 (B) electrical insulation systems (Table V)	OBJY2	UL E252663	
- Bobbin	CHANGCHUN PLASTICS	Phenolic; T375HF	V-0; 150°C, min 0.43mm thick.	QMFZ2/8	UL, CUL E59481	

- Magnet wire (for primary winding)	Interchangeable	MW28, MW75	130°C	OBMW2	UL	
- Magnet wire (for secondary winding)	Interchangeable	MW28, MW75	130°C	OBMW2	UL	
- Insulation tape	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	CT* (b)(g)	130°C	OANZ2	UL E165111	
-Varnish	John C. Dolph Co	BB-359FR	155°C	OBOR2	UL E317427	
-Thermal link	ZHANGZHOU AUPO ELECTRONICS CO LTD	A4	2A; 130°C	XCMQ2/8	UL, CUL E140847	
- Primary lead wire	SHENZHEN TONGJIAXIN ELECTRONIC CO LTD	1672,1015	Min 24AWG ; 105°C, 300V, VW-1.	AVLV2/8	UL, CUL E338302	
- Primary lead wire - Alternate	DONGGUAN CHANGAN HUAWEI WIRE CO LTD	1672,1015	Min 24AWG ; 105°C, 300V, VW-1.	AVLV2/8	UL, CUL E320244	
- Primary lead wire - Alternate	DONGGUAN TRIUMPHCABLE CO LTD	1672,1015	Min 24AWG ; 105°C, 300V, VW-1.	AVLV2/8	UL, CUL E249743	
- Primary lead wire - Alternate	DONGGUAN CITY JIN ZAO LI ELECTRONIC TECHNOLOGY CO LTD	1672,1015	Min 24AWG ; 105°C, 300V, VW-1.	AVLV2/8	UL, CUL E348531	
- Primary lead wire - Alternate	RAN SUN INDUSTRIAL CO	1672,1015	Min 24AWG ; 105°C, 300V, VW-1.	AVLV2/8	UL, CUL E157882	
- Primary lead wire - Alternate	SHENZHEN HONGYA ELECTRONICS CO LTD	1672,1015	Min 24AWG ; 105°C, 300V, VW-1.	AVLV2/8	UL, CUL E346933	

- Primary lead wire - Alternate	GUANG DONG XIN LONG ENTERPRISE CO	1672,1015	Min 24AWG ; 105°C, 300V, VW-1.	AVLV2/8	UL, CUL E207567	
- Primary lead wire - Alternate	ZHONGSHAN BAOXU ELECTRONICS CO LTD	1015	Min 24AWG ; 105°C, 600V, VW-1.	AVLV2/8	UL, CUL E496532	
- Primary lead wire - Alternate	HUIZHOU CITY AO KAI SI WIRE & CABLE CO LTD	1015	Min 24AWG ; 105°C, 600V, VW-1.	AVLV2/8	UL, CUL E503522	
- Secondary lead wire	SHENZHEN TONGJIAXIN ELECTRONIC CO LTD	1672,1015	Min 24AWG ; 105°C, 300V, VW-1.	AVLV2/8	UL, CUL E338302	
- Secondary lead wire -Alternate	DONGGUAN CHANGAN HUAWEI WIRE CO LTD	1672,1015	Min 24AWG ; 105°C, 300V, VW-1.	AVLV2/8	UL, CUL E320244	
- Secondary lead wire -Alternate	DONGGUAN TRIUMPHCABLE CO LTD	1672,1015	Min 24AWG ; 105°C, 300V, VW-1.	AVLV2/8	UL, CUL E249743	
- Secondary lead wire -Alternate	DONGGUAN CITY JIN ZAO LI ELECTRONIC TECHNOLOGY CO LTD	1672,1015	Min 24AWG ; 105°C, 300V, VW-1.	AVLV2/8	UL, CUL E348531	
- Secondary lead wire -Alternate	RAN SUN INDUSTRIAL CO	1672,1015	Min 24AWG ; 105°C, 300V, VW-1.	AVLV2/8	UL, CUL E157882	
- Secondary lead wire -Alternate	SHENZHEN HONGYA ELECTRONICS CO LTD	1672,1015	Min 24AWG ; 105°C, 300V, VW-1.	AVLV2/8	UL, CUL E346933	
- Secondary lead wire -Alternate	GUANG DONG XIN LONG ENTERPRISE CO	1672,1015	Min 24AWG ; 105°C, 300V, VW-1.	AVLV2/8	UL, CUL E207567	

- Secondary lead wire -Alternate	ZHONGSHAN BAOXU ELECTRONICS CO LTD	1015	Min 24AWG ; 105°C, 600V, VW-1.	AVLV2/8	UL, CUL E496532	
- Secondary lead wire -Alternate	HUIZHOU CITY AO KAI SI WIRE & CABLE CO LTD	1015	Min 24AWG ; 105°C, 600V, VW-1.	AVLV2/8	UL, CUL E503522	
-Heat shrinkable tube enclosed secondary lead wire	GUANGZHOU KAIHENG NEW MATERIAL CO LTD	K-102 (CB)	Rated 300V, 125°C, VW-1	YDPU2/8	UL, CUL E321827	
-Heat shrinkable tube enclosed secondary lead wire -Alternate	SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO LTD	RSFR	Rated 600V,125°C, VW-1	YDPU2/8	UL, CUL E203950	
-Heat shrinkable tube enclosed secondary lead wire -Alternate	CHANGYUAN ELECTRONICS GROUP CO LTD	CB-DWT	Rated 600V,125°C, VW-1	YDPU2/8	UL, CUL E180908	
-Heat shrinkable tube enclosed secondary lead wire -Alternate	Interchangeable	Interchangeable	Min. 300V,125°C, VW-1	YDPU2/8	UL, CUL	
DC fan	SUNONWEALTH ELECTRIC MACHINE INDUSTRY CO LTD	HA40101V4-1000C-A99	12VDC, 0.46W(max.), air flow: 5.4 CFM, max. operating temp. 70 degree C. See UL test reference ID9-04 for its spec.	GPWV2/8	UL, CUL E77551	
DC fan-lead wire	Interchangeable	1015	Min 24AWG ; 80°C,VW-1, 300V	AVLV2/8	UL, CUL	
DC fan- lead wire connector	Interchangeable	Interchangeable	Copper alloy pins holder housed in bodies of plastic rated V-2 minimum	QMFZ2/8; ECBT2/8	UL, CUL	
Electrolytic Capacitor (C1)	Interchangeable	Interchangeable	27-40uF, min 400V, 105 degree C	--	--	

Electrolytic Capacitor (C2)	Interchangeable	Interchangeable	8-12uF, min 400V, 105 degree C	--	--	
Electrolytic Capacitor (C3)	Interchangeable	Interchangeable	390-560uF, min 25V, 105 degree C	--	--	
Electrolytic Capacitor (C4)	Interchangeable	Interchangeable	180-260uF, min 10V, 105 degree C	--	--	
Relay (K1)	CHANGZHOU RUIYING IMPORT&EXPORT CORP. LTD	JQC-3FF-S-Z	12Vdc; 15A/125Vac; 105 degree C	NRNT2	UL E495411	
Connector (CN3)	Interchangeable	Interchangeable	Rated min. 60Vac, min. 0.83A Copper alloy pins holder housed in bodies of plastic rated V-1 minimum	ECBT2/8	UL, CUL	
MOS (Q2, Q3)	Interchangeable	Interchangeable	Min. 400V, min. 0.5A	--	--	
Line Choke (L1)	Shenzhen Glorious Electronic Co.,Ltd.	GCRH74-471MC	130 degree C. See UL test reference ID4-02 for details.	--	--	
Glue for fixing components in place	Interchangeable	Interchangeable	Min. V-2, min. 105 degree C	QMFZ2/8	UL, CUL	

Enclosures

Type	Supplement Id	Description
Photographs	03-01	Overall View 1 of unit
Photographs	03-02	Overall View 2 of unit
Photographs	03-03	Overall View 3 of unit
Photographs	03-04	Internal View of unit
Photographs	03-05	PWB View- Components Side
Photographs	03-06	PWB View- Traces Side
Photographs	03-07	Overall View of PDLC Film or smart glass (The normal loading of power supply)
Schematics + PWB	05-02	PWB Layout
Manuals	06-01	Manual
Miscellaneous	07-01	Enclosure Drawing (unit: mm)
Miscellaneous	07-02	Label Drawing
Miscellaneous	07-03	Output Cord Strain Relief Spec. (unit: mm)
Miscellaneous	07-04	My sheet spec. (unit: mm)
Miscellaneous	07-05	Drawing of openings in top and bottom enclosure



30W-50W PDLC Film Power Supply Specifications

Shenzhen Filmbase Technology CO.,LTD

30W-50W PDLC Film Power Supply Specifications

1.Features

- 1.) AC constant voltage output;
- 2.) UL-94 V0 engineering plastic fireproof shell;
- 3.) Two types of heat dissipation: active heat dissipation and passive heat dissipation;
- 4.) Compatible with 433 radio frequency module;
- 5.) Life Span > 50000 h;
- 6.) Five-year warranty;
- 7.) Intelligent PDLC film and intelligent smart glass special power supply;
- 8.) Conversion efficiency up to 87%;
- 9.) The panel switch 86 is optional.

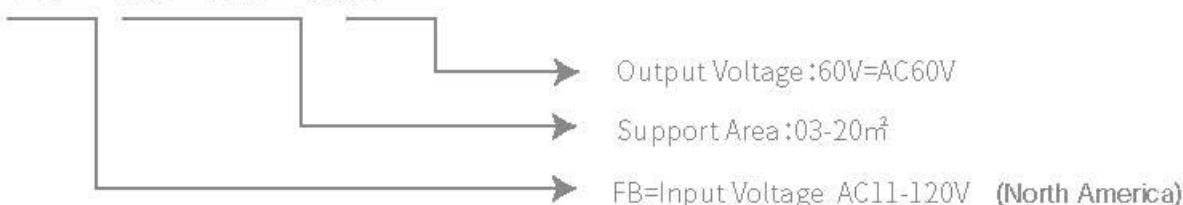


2. Description

Yg-927 series is a 30W, 50W AC TO AC intelligent dimming film special power supply, with constant voltage design output as the main feature, and with 433 radio frequency remote control technology. The input voltage of this series of special power supply for intelligent dimming film is divided into single voltage input, which is AC110-120V respectively, and the output is AC60V. With natural air cooling and passive air cooling, it can work in the temperature range of -20°C to 50°C. The power output of this series can be matched with relevant control modules to achieve the function matching required by customers.

3.Model Number:

FB - 03 - 20 - 60V

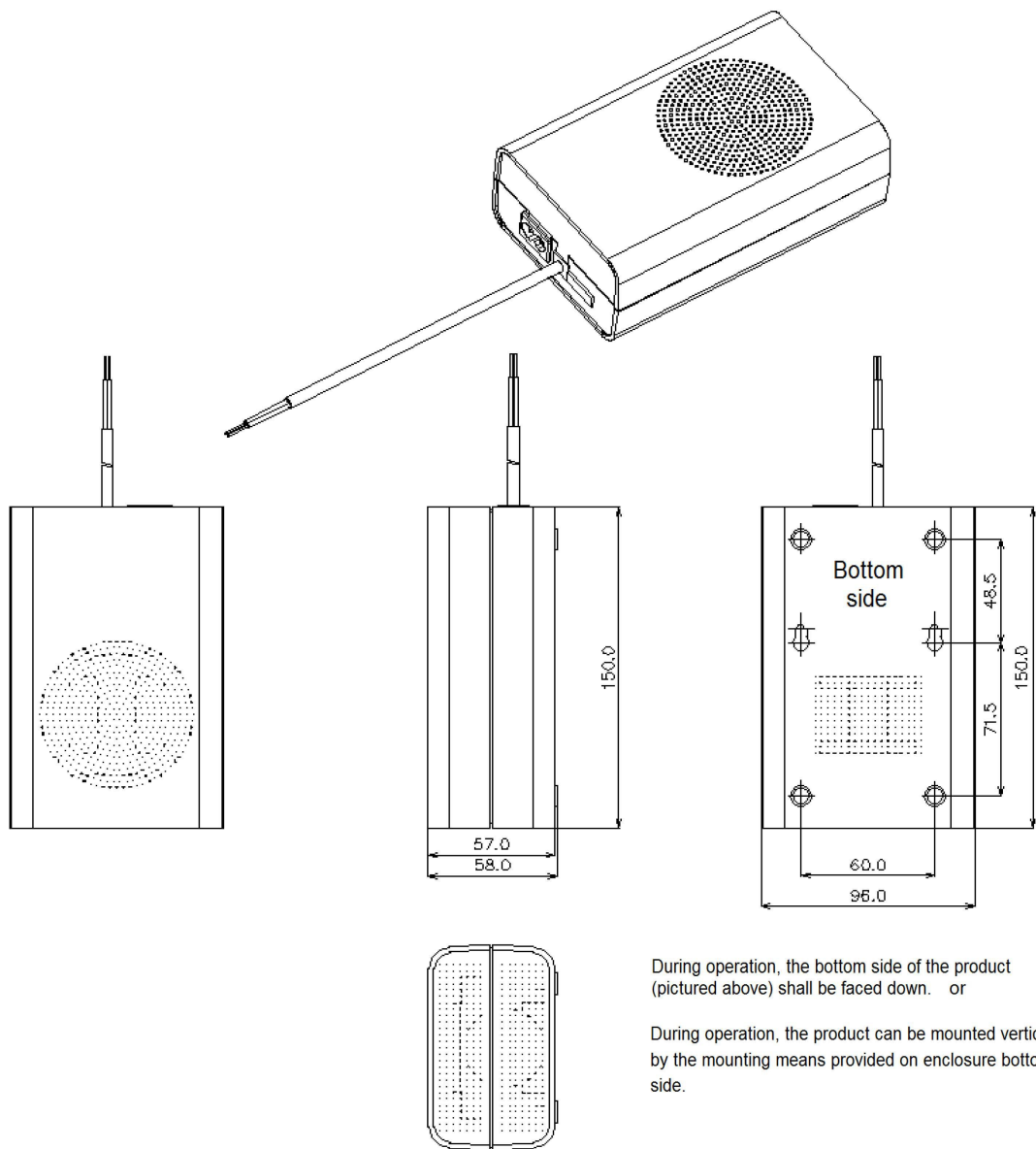


30W-50W PDLC Film Power Supply Specifications

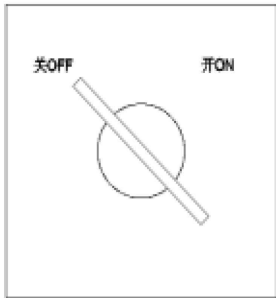
4.Parameter List

Model		FB-03-20-60V
Output	Alternating Voltage	60V
	Frequency	50Hz
	Rated Current(Max)	0.83A
	Rated Power	50W
	Adjustable Voltage Range	48-65V
	Ripple&Noise(Max)	100mVP-P
	Voltage Accuracy	+/-1.0%
Input	Input Voltage	AC110-120V
	Frequency	50/60Hz
	Power factor	0.9
	Conversion Efficiency	87%
Protection	Overcurrent	95-108%
	Short-circui	Hiccup Model,,recovers automatically after fault conditions is removed
	Overvoltage	Turn off the output voltage, recovers after restarting.
	Over Temperature	Turn off the output voltage,recovers automatically after the temperature drops
	Leakage Current	<0.7mA@230V
Environment	Working Temperature	-20° C-50° C
	Max Shell Temperature	80° C
	Storage Temperature	--20° C-50° C
	Storage Humidity	20-95%RH, non-condensing
	Temperature Coefficient	0.03%/° C (0-50° C)
	Vibration Resistance	10~500Hz,5G 12mins/Period,90mins for X,Y,Z each axis
Certifications	Withstanding Voltage	I/P-O/P:3.75KVAC I/P-FG:2.0KVAC O/P-FG:1.5KVAC
	Insulation Resistance	I/P-O/P,O/P-FG,O/P-FG:100M Ohms/500VDC/25°C/70%RH
Others	Size	150*96*57 mm(L*W*H)
	Package	170*110*90mm(L*W*H)0.85KG

30W-50W PDLC Film Power Supply Specifications



1.)Cut off power



M3.5*30
2PCS

Notice :

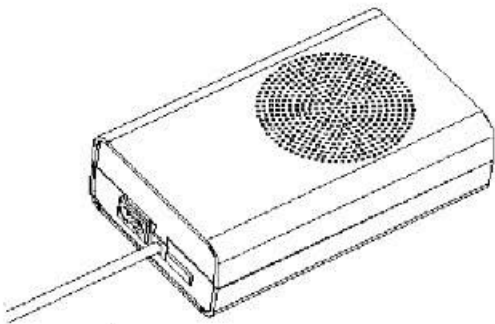
The equipment is only suitable for mounting at heights less than or equal to 2 meters

30W-50W PDLC Film Power Supply Specifications

2.) Connect the mains line to the power supply input wires respectively, and notice the joint insulation making;



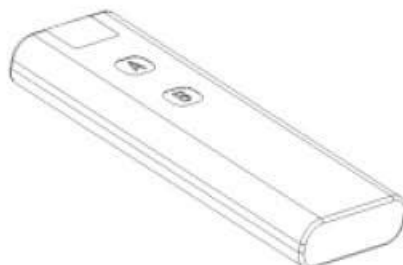
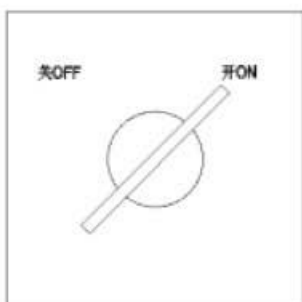
3.) Connect the red and black wires of the dimming film to the round terminal wires (the output current is AC, so it can be regardless of direction), and connect them to the power supply output port.



4.) Insert the connected AC plug into the AC input port of the power supply.

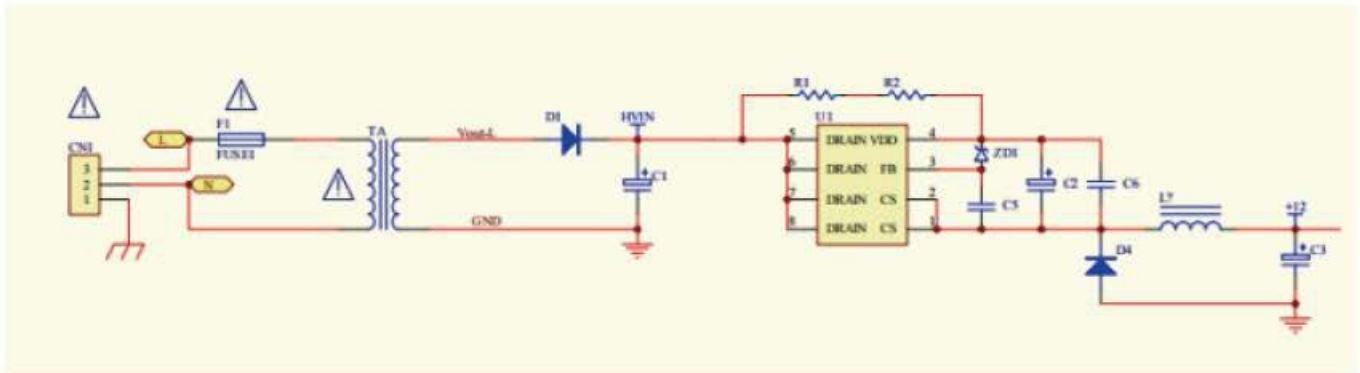


5.) Turn on the power switch, the power starts to work, with a remote controller can control the PDLC film on and off;



30W-50W PDLC Film Power Supply Specifications

7. Electrical Circuit Drawing



8.Packing List

1. One 30W/50W power supply;
2. One input wire of power supply;
3. One output wire of power supply;
4. One remote control;
5. One instruction book;
6. One qualification certificate;

9.Warranty Statement

1. The main body of the power supply is guaranteed for three years;
2. Free maintenance for quality problems within three years;
3. Power input wire and output wire do not provide warranty;
4. The remote control is guaranteed for one year, and the battery is not guaranteed;
5. The following conditions are exceptions to warranty:
 - a. The free warranty period of the whole machine or parts of the product has expired;
 - b. Products have been disassembled or repaired without permission;
 - c. Power supply burns out due to voltage instability;
 - d. Physical damage of products, such as fall, extrusion, deformation, etc.;
 - e. Power supply is damaged due to incorrect wiring.
 - f. Defects caused by force majeure (including operation error, liquid injection, damage, natural disaster, etc.);
 - g. Lifetime maintenance of the product, such as beyond the guarantee period, our company provides cost price maintenance;

Filmbase Address

Office HQ: 31F, 3A Building, Smart Park, Baolong, Longgang, Shenzhen ,China

Tel: +86-75528505346 Fax:+86-75584651406

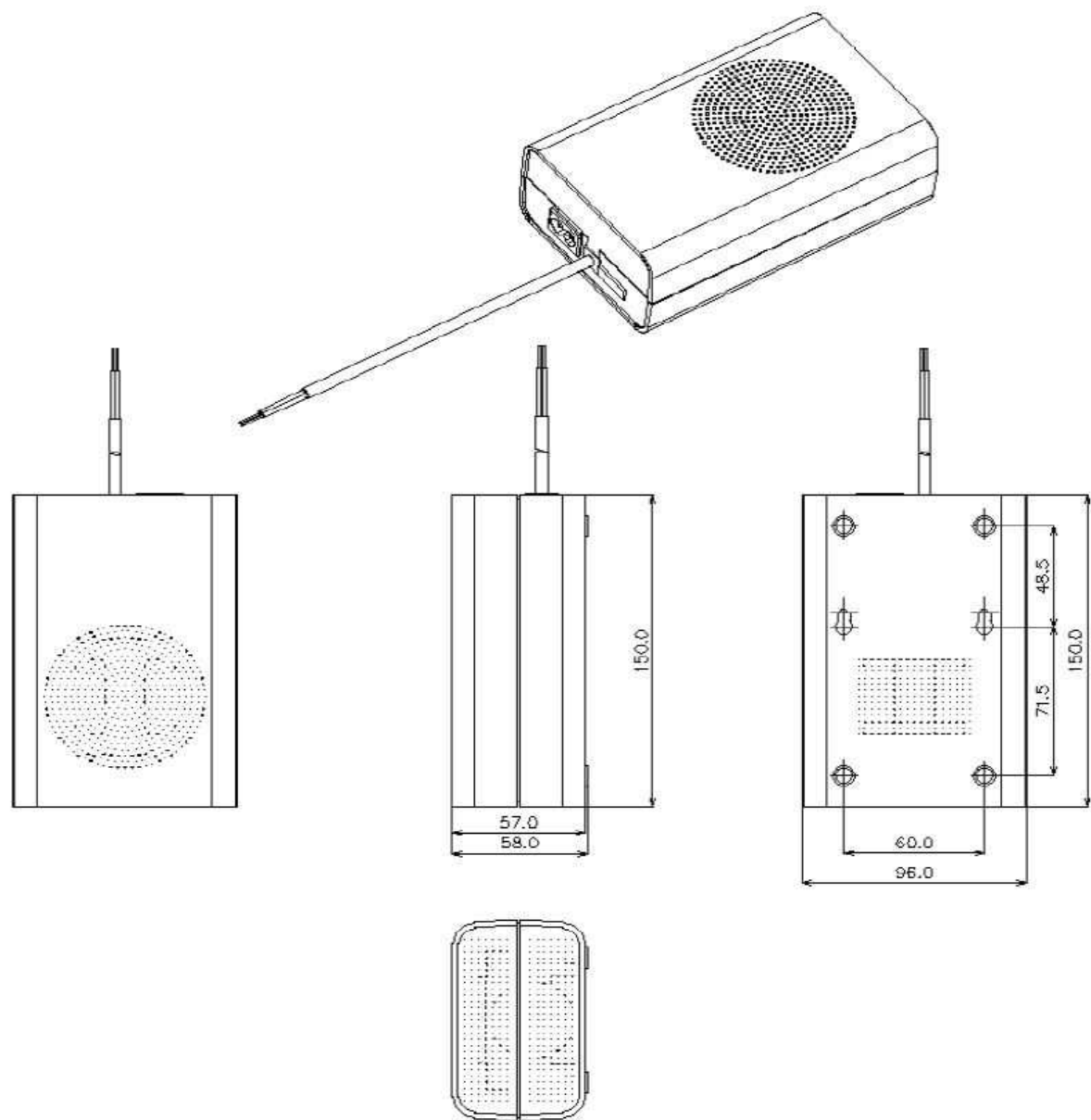
Email: info@smartfilmbase.com

Factory: Building2#,Huaqiang Industry Park. Baolong . Longgang. Shenzhen,China

Tel: +86-75528505346 Fax:+86-75584651406

Mobile& WhatsApp :+86-19129308937

Email :Grace@smartfilmbase.com



ON/OFF OUTPUT INPUT

Importer name: xxxx
Importer address: xxxx
Shenzhen Filmbase Technology Co., Ltd.
31F, 3A Building, Smart Park, Baolong,
Longgang, Shenzhen. Made in China

MODEL INPUT : AC110-120V 50/60Hz 0.6A OUTPUT : AC60V MAX 0.83A

FB-03-20-60V



A

B

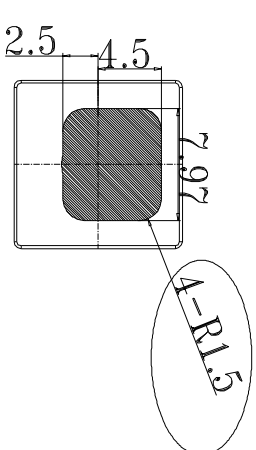
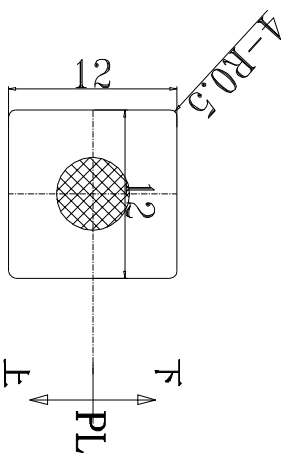
C

D

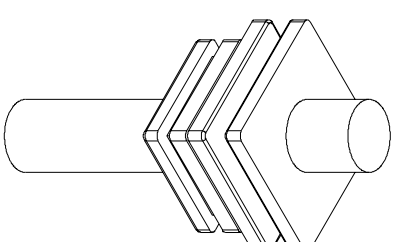
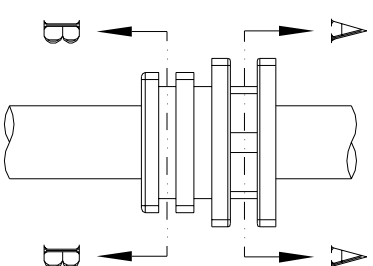
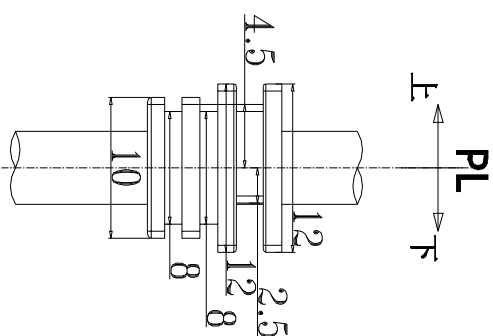
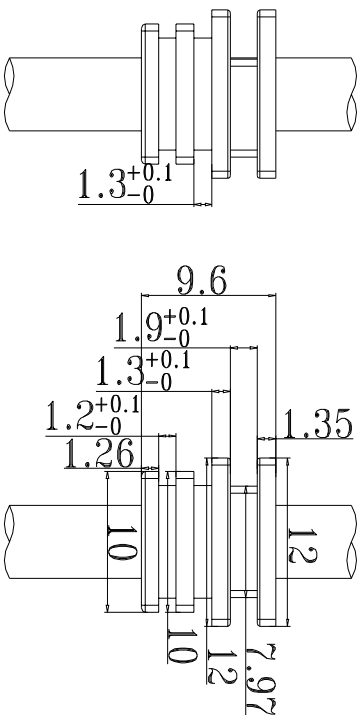
E

F

1



SECTION A-A



NOTE:

1

2

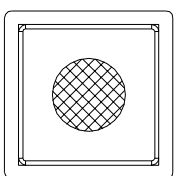
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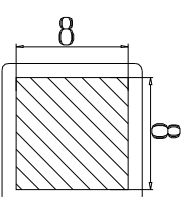
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4

4



SECTION B-B



A

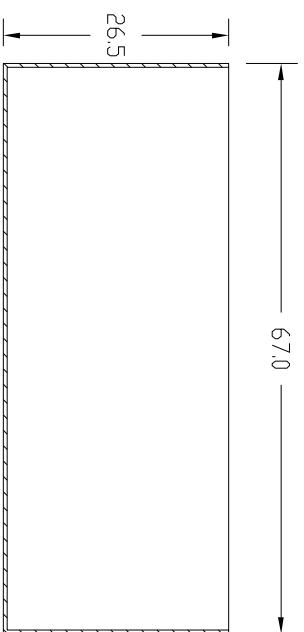
B

C

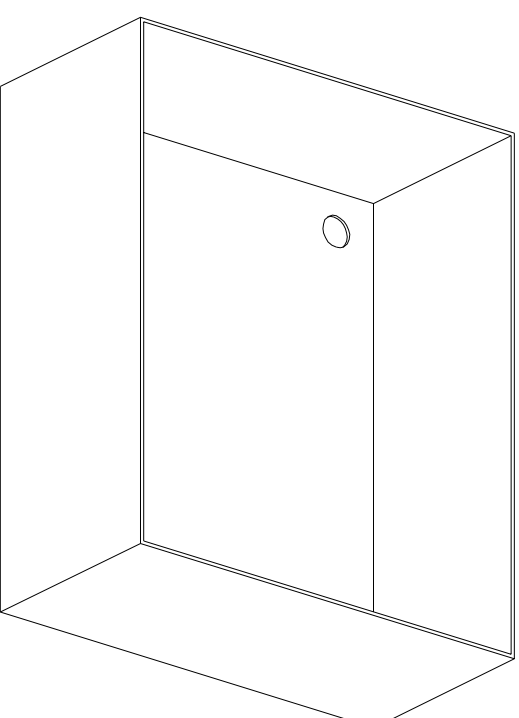
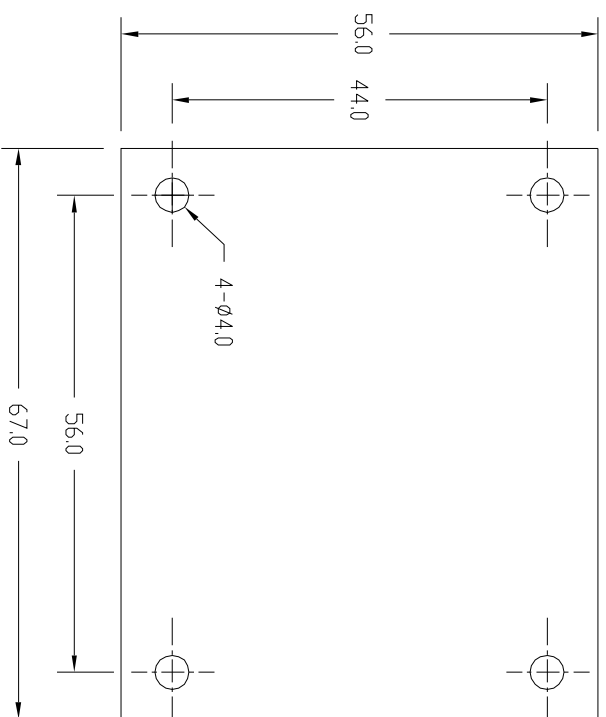
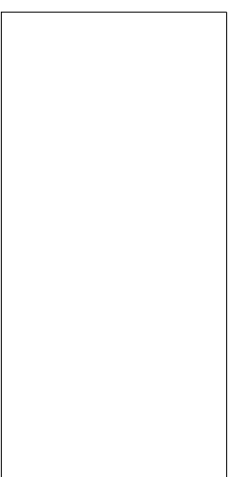
D

E

F

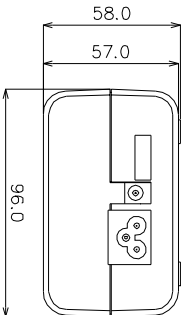
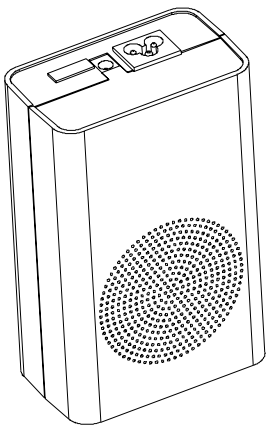
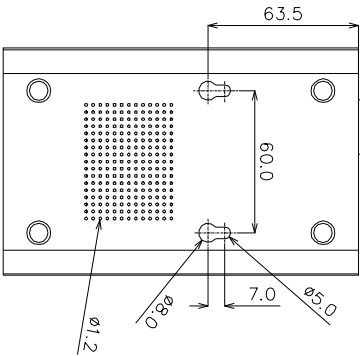
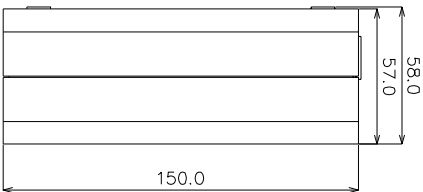
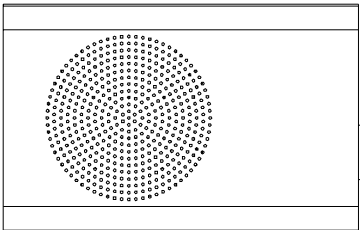
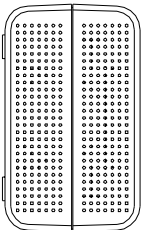


SECTION A-A





12345678910



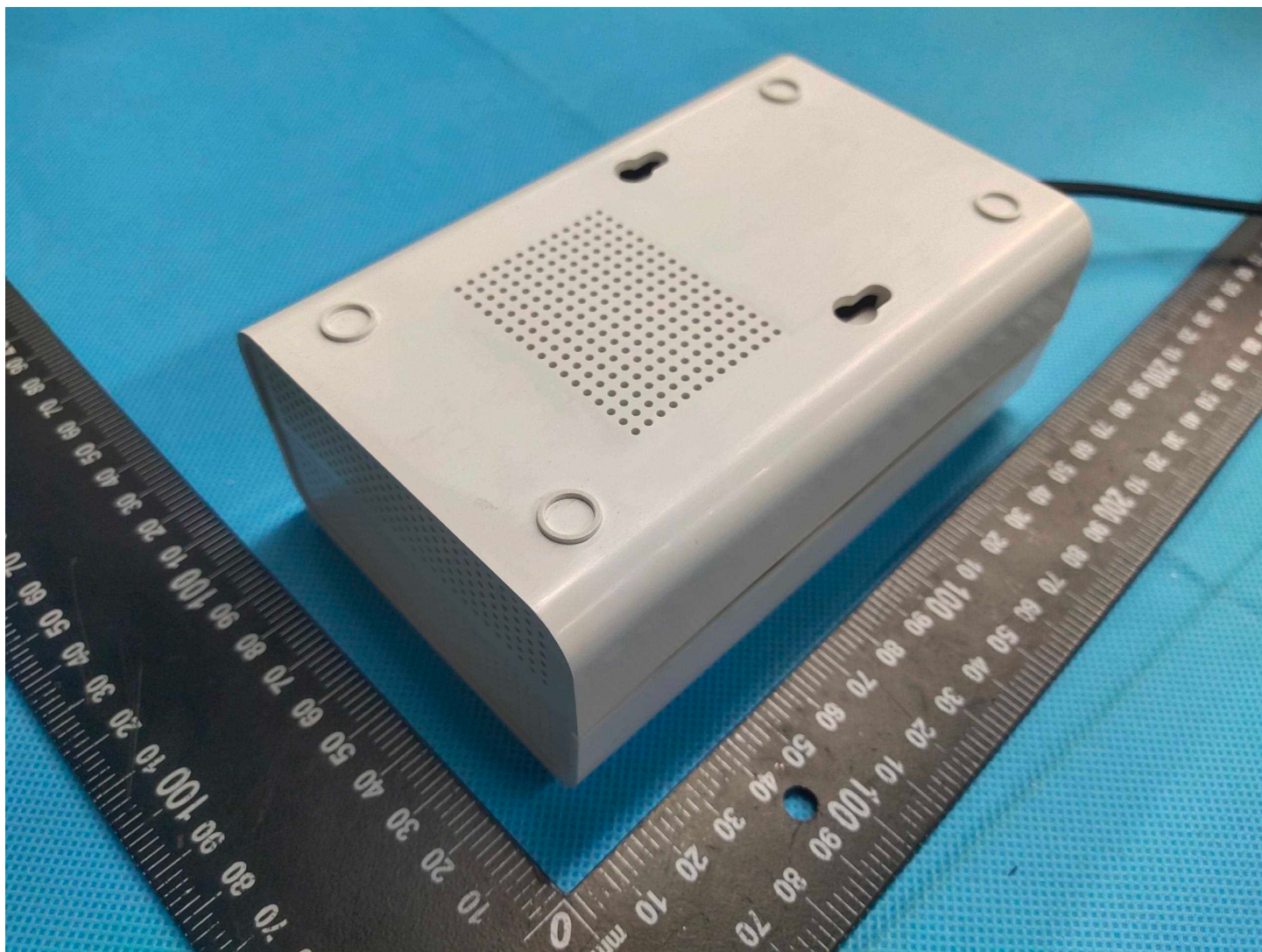
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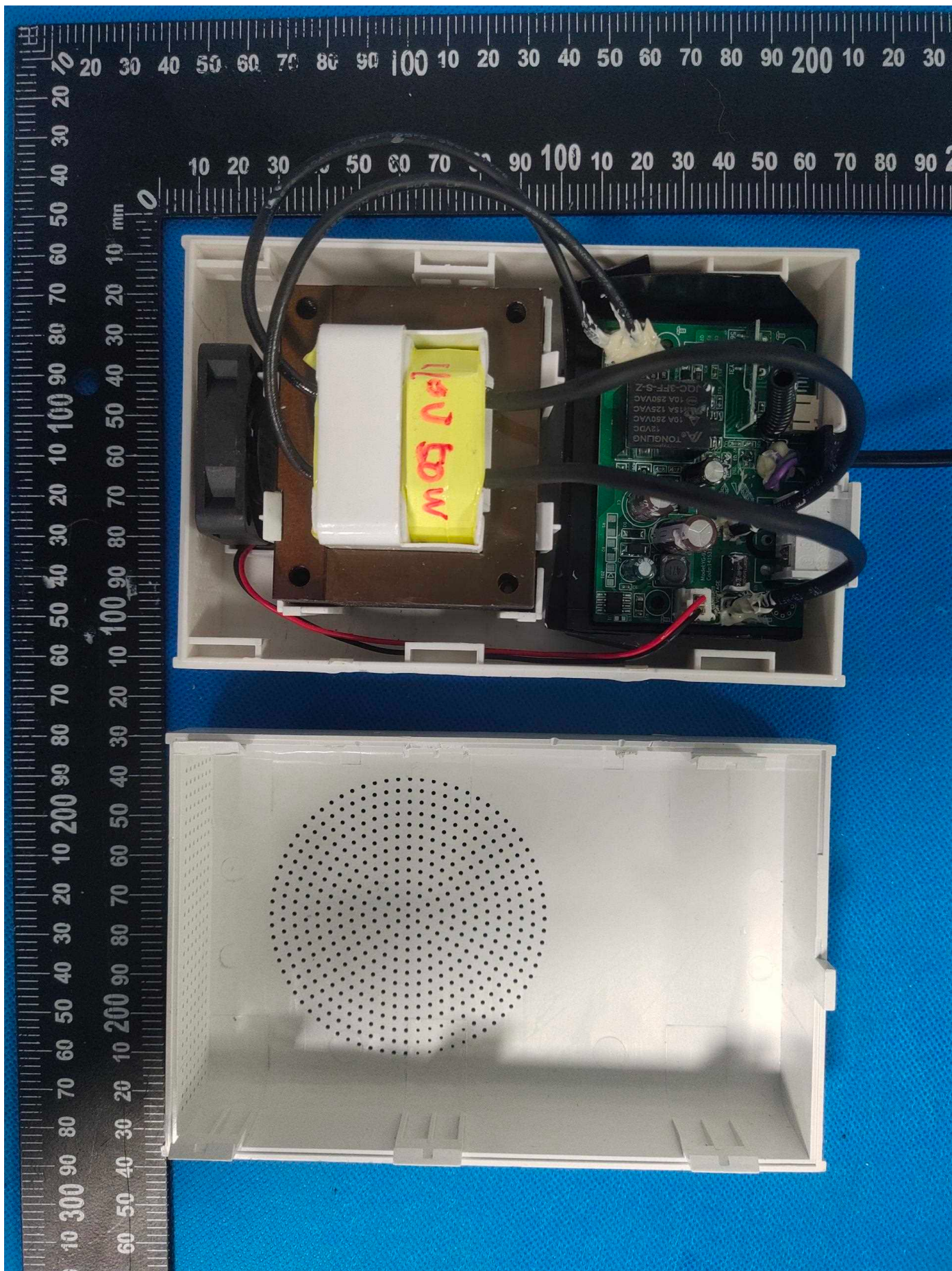
					深圳御光新材有限公司				
标记	处数	更改文件		签名	日期	材料		产品	
绘图						比例	版本	单位	数量
设计						1:1	B0	MM	1
审核			批准			共	张	第	张
客户编码									

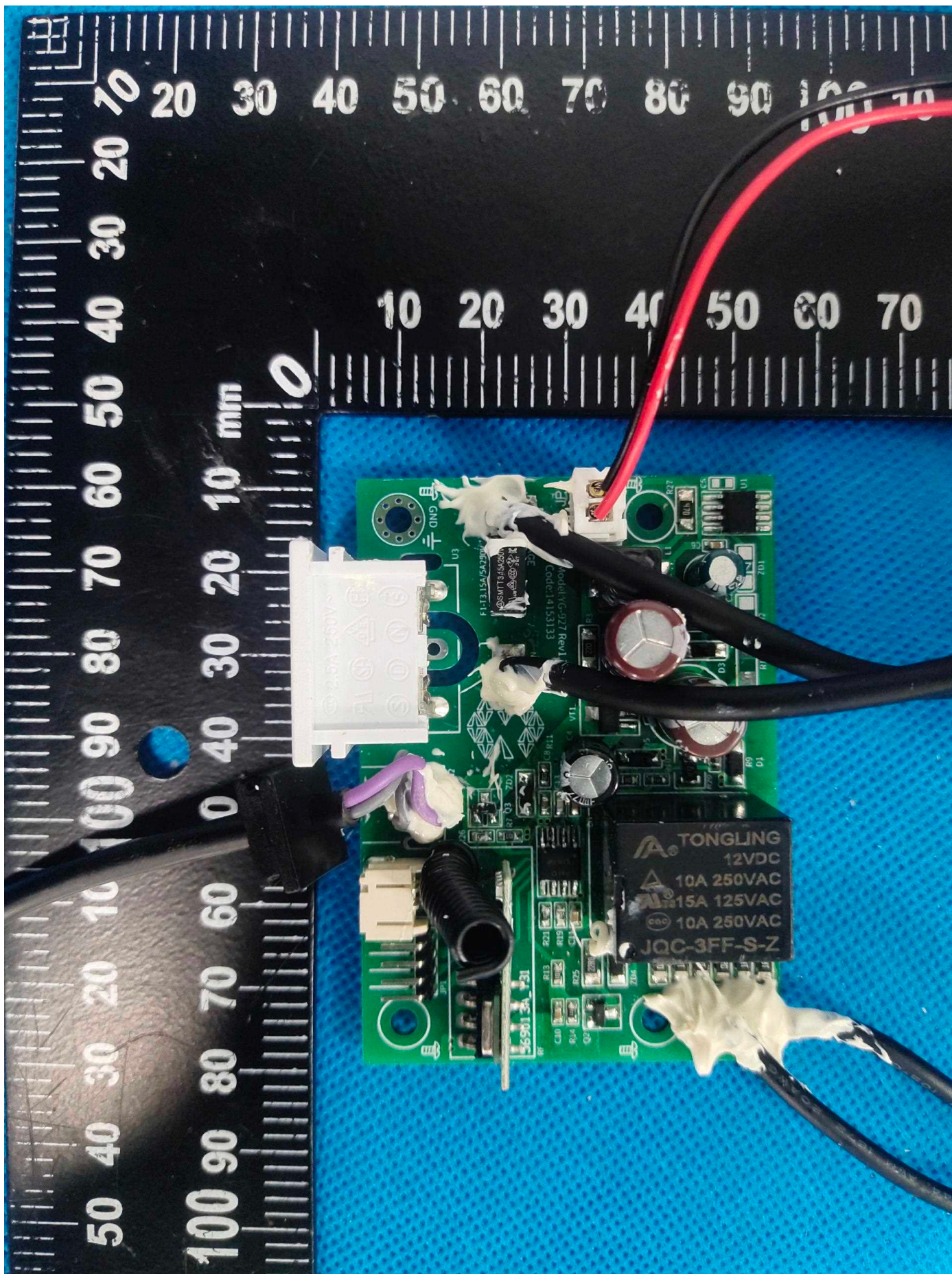
A B C D E F

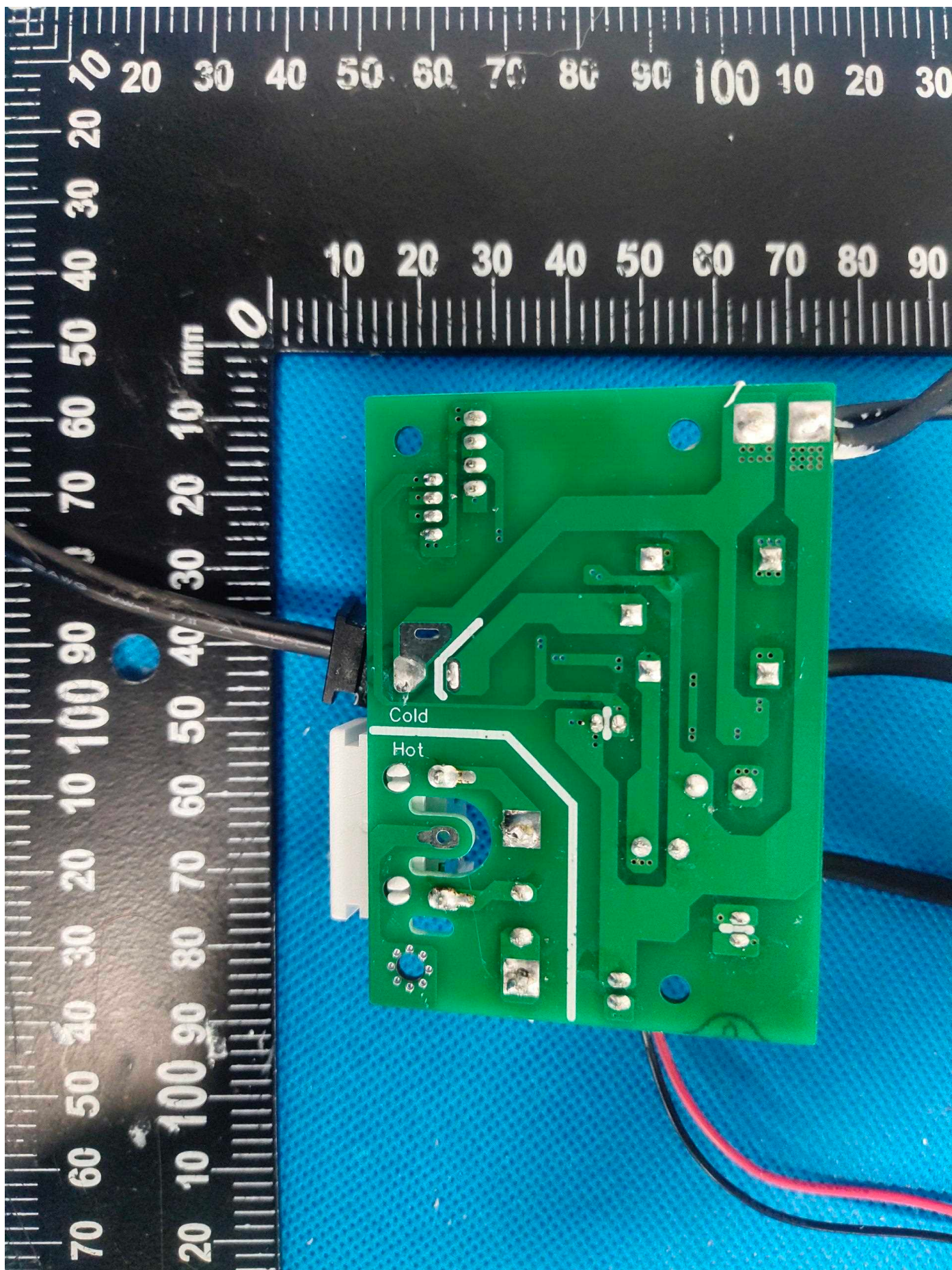




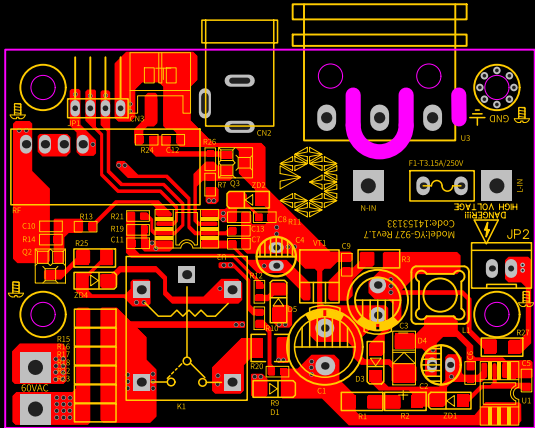


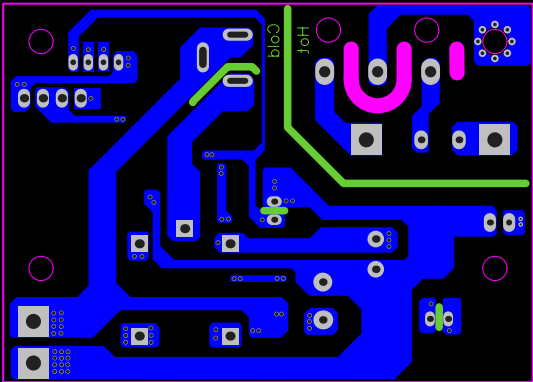












Test Record No. 1

Testing of PDLC Film, Smart glass, Transformer, Model FB-03-20-60V was not considered necessary based upon previous evaluation under CB Scheme with CB Test Certificate No., DK-125806-UL dated 2022-03-31 and the corresponding test report ref. no. CB report WTH21D12146844D dated 2022-03-24 were issued by UL (Demko), Borupvang 5A DK-2750 Ballerup, DENMARK.

The test results and clause verdicts of the above noted report were reviewed and found to comply with the applicable Standard UL 62368-1. As a result the clause verdicts and test results for this report were noted as N/A and have been referred to the UL Demko CB Report for details.

The following tests were conducted:

Tests performed (name of test and test clause):	Testing location: None
STEADY FORCE TEST, 250 N (4.4.4.2, T.5)	
DROP TEST (4.4.4.3, T.7)	
IMPACT TEST (4.4.4.4, T.6)	
STRESS RELIEF TEST (4.4.4.7, T.8)	
CLASSIFICATION OF ELECTRICAL ENERGY SOURCES (5.2.2.1-5.2.2.6)	
DETERMINATION OF WORKING VOLTAGE (5.4.1.8)	
BALL PRESSURE TEST (5.4.1.10.3)	
SEPARABLE THIN SHEET MATERIAL (5.4.4.6.2)	
ANTENNA TERMINAL INSULATION – VOLTAGE SURGE (5.4.5, G.10.3.2)	
HUMIDITY CONDITIONING (5.4.8)	
ELECTRIC STRENGTH TEST – TYPE TESTING OF SOLID INSULATION (5.4.9.1)	
POWER MEASUREMENTS (6.2.2.2, 6.2.2.3)	
TOP OPENINGS AND TOP OPENING PROPERTIES (6.4.8.3.3, S.2)	
BOTTOM OPENINGS AND BOTTOM OPENING PROPERTIES (6.4.8.3.4, ANNEX S.3)	
INPUT TEST: SINGLE PHASE (B.2.5)	
NORMAL OPERATING CONDITIONS TEMPERATURE MEASUREMENT (B.2.6, 5.4.1.4, 6.3, 9.2)	
SIMULATED ABNORMAL OPERATING CONDITIONS (B.3)	
SIMULATED SINGLE FAULT CONDITIONS (B.4)	
TEST FOR THE PERMANENCE OF MARKINGS (ANNEX F.3.10)	
TRANSFORMER OVERLOAD (ANNEX G.5.3.3)	
STRAIN RELIEF TEST (G.7.3.2)	
LIMITED POWER SOURCE (ANNEX Q.1)	
STEADY FORCE TEST, 10 N (ANNEX T.2 , 5.4.2.6, 5.4.3.2, G.15.3.6)	
The following tests were waived:	Rationale for Waiving

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Test results are valid only for the tested equipment. These tests are considered representative of the products covered by this Test Report. The test methods and results of the above tests have been reviewed and found to be in accordance with the requirements in the Standard(s) referenced at the beginning of this Test Report.

The following supplements are provided as part of this Test Record. NOTE: These supplements are only available to the Applicant via the myUL™ Client Portal.

Type	Supplement Id	Description
Attachment	02-01	CRD