


1.0 Reference and Address			
Report Number	140900039SHA-002	Original Issued:	21-Oct-2014
		Revised:	6-Apr-2016
Standard(s)	Information Technology Equipment Safety Part 1: General Requirements (UL 60950-1 Issued: 2007/03/27 Ed: 2 Rev: 2014/10/14)		
	Information Technology Equipment Safety Part 1: General Requirements (CAN/CSA C22.2 No. 60950-1 Issued: 2007/03/27 Ed: 2 (R2012) Amd. 1: 2011, Amd. 2: 2014)		
Applicant	GlobTek, Inc.	Manufacturer	GlobTek (Suzhou) Co., Ltd.
Address	186 Veterans Dr. Northvale, NJ 07647 USA	Address	Building 4. No 76 JinLing East Road, Suzhou Industrial Park, Suzhou, JiangSu, 215021
Country	USA	Country	China
Contact	Hans Moritz	Contact	Demon Zhou
Phone	(201)784-1000 Ext.253	Phone	86 512 6279 0301 Ext.189
FAX	(201)784-0111	FAX	86 512 6279 0355
Email	Moritzh@globtek.com	Email	demon.zhou@globtek.cn

2.0 Product Description	
Product	ITE Power Supply
Brand name	
Description	<p>Product covered by this report is power supply module. The different models are corresponding to three structure types respectively.</p> <p>Two are direct plug-in power adapter with interchangeable plug portion, which is Class II apparatus. It can be used with different plug types. The evaluation reports of the different plug types are also attached with this report. Two pieces of outer enclosure are enclosed with ultrasonic welding without screw.</p> <p>Model GT-41134-0606-W2-TAB is special direct plug-in type for North America market, with particular housing, varistor and fixed NEMA 1-15P plug.</p>
Models	GT*41134*****, GT*96060***** or GT-41134-0606-W2-TAB (where * in the model name are letters or numbers or blank)
Model Similarity	<p>The 1st "*" part can be 'M' or '-' or 'H' for market identification and not related to safety.</p> <p>The 2nd "*" part can be "-" or "CC", "-" = Constant Voltage Model, CC = Constant Current Model.</p> <p>The 3rd "*" denotes the rated output wattage designation, which can be "01" to "06", with interval of 1.</p> <p>The 4th "*" denotes the standard rated output voltage designation, which can be "03", "04", "06", "12", "15", "18", "24", "36" or "48". These standard rated output voltage designations correspond to seven isolated transformer models (See the section 4.0 for details). Each transformer model is identical in insulation construction including clearance and creepage except number of turns per coil.</p> <p>The 5th "*" is optional deviation, subtracted from standard output voltage, which can be "-0.1" to "-11.9" with interval of 0.1, or blank to indicate no voltage different.</p> <p>The 4th "*" and 5th "*" together denote the output voltage, with a range of 3.3 - 48 volts.</p> <p>The last "*" denote any six character = 0-9 or A-Z or ([] or - or blank for marketing purposes.</p> <p>Transformers used in models of GT*41134***** and GT*96060***** are with similar construction. The turns of secondary winding may be added or reduced according different output voltage. The whole coil of transformer for GT-41134-0606-W2-TAB is wrapped by copper film.</p> <p>The new added structure type only use F1 fuse in primary circuit and a LED indicator (optional) used in secondary circuit.</p> <p>GT*96060***** is identify with GT*41134***** except for model name. Some non-critical components may be adjusted according different output voltage. The parameters of these components depend on output voltage.</p>
Ratings	<p>Input: 100-240V~, 50-60Hz, 0.3A or 0.6A for GT*41134***** and GT*96060*****;</p> <p>120V~, 60Hz, 0.3A for GT-41134-0606-W2-TAB</p> <p>Output: Refer to illustration No.1 for details.</p>
Other Ratings	N/A

3.0 Product Photographs

PHOTO 1 - EXTERNAL VIEW OF ADAPTER MODEL GT*41134*****



PHOTO 2 - EXTERNAL VIEW OF ADAPTER MODEL GT*41134*****



3.0 Product Photographs

PHOTO 3 - EXTERNAL VIEW OF ADAPTER MODEL GT*41134*****



PHOTO 4 - INTERNAL VIEW OF ADAPTER MODEL GT*41134*****



3.0 Product Photographs

PHOTO 5 - COMPONENT SIDE VIEW OF PCB OF ADAPTER MODEL GT*41134*****

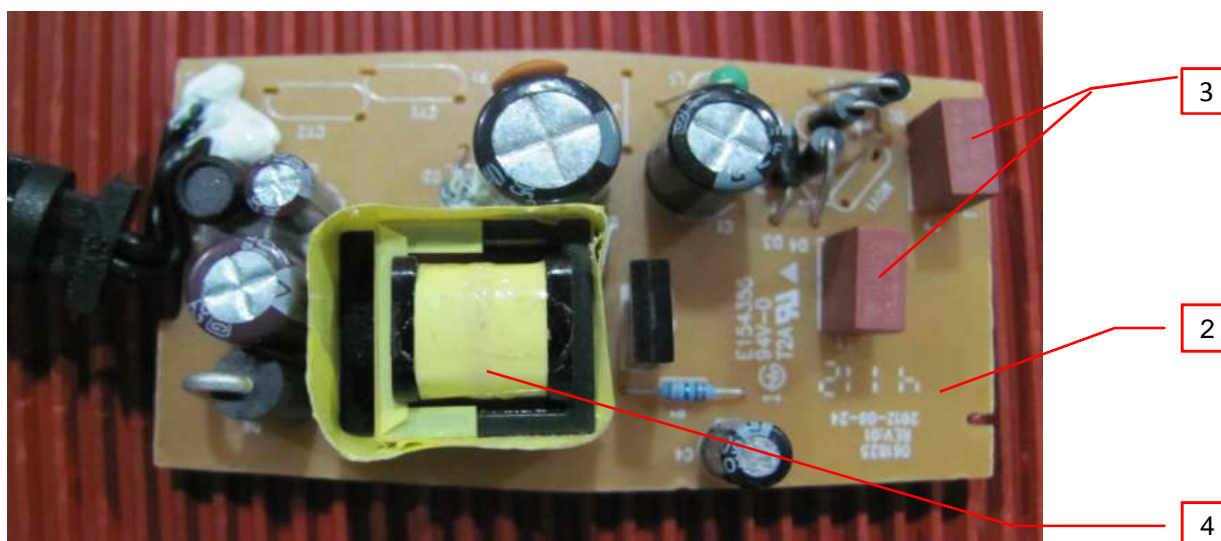
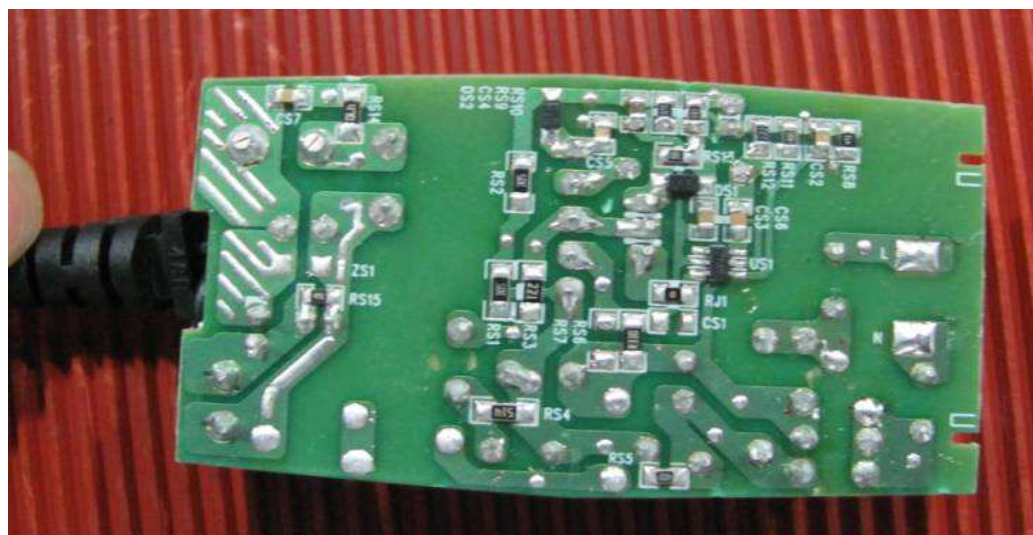


PHOTO 6 - SOLDERING SIDE VIEW OF PCB OF ADAPTER MODEL GT*41134*****



3.0 Product Photographs

PHOTO 7 - EXTERNAL VIEW OF MODEL GT-41134-0606-W2-TAB



PHOTO 8 - EXTERNAL VIEW OF MODEL GT-41134-0606-W2-TAB



3.0 Product Photographs

Photo 9 - Component side view of PCB of model GT-41134-0606-W2-TAB

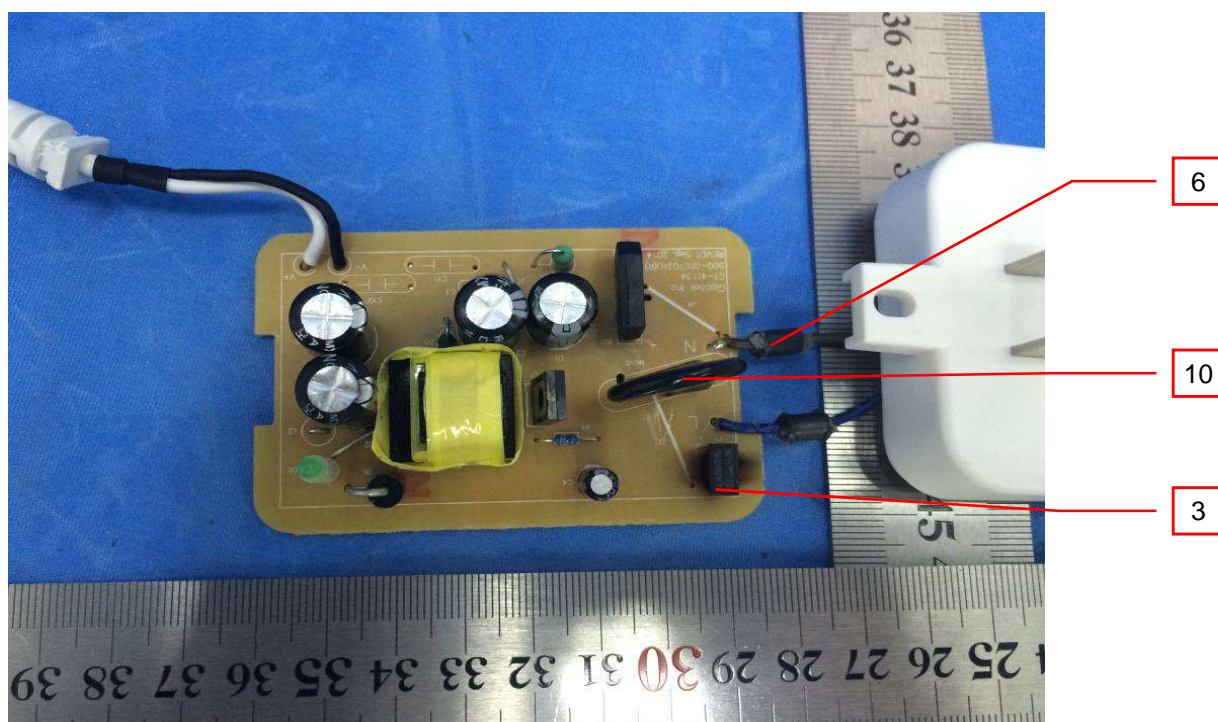
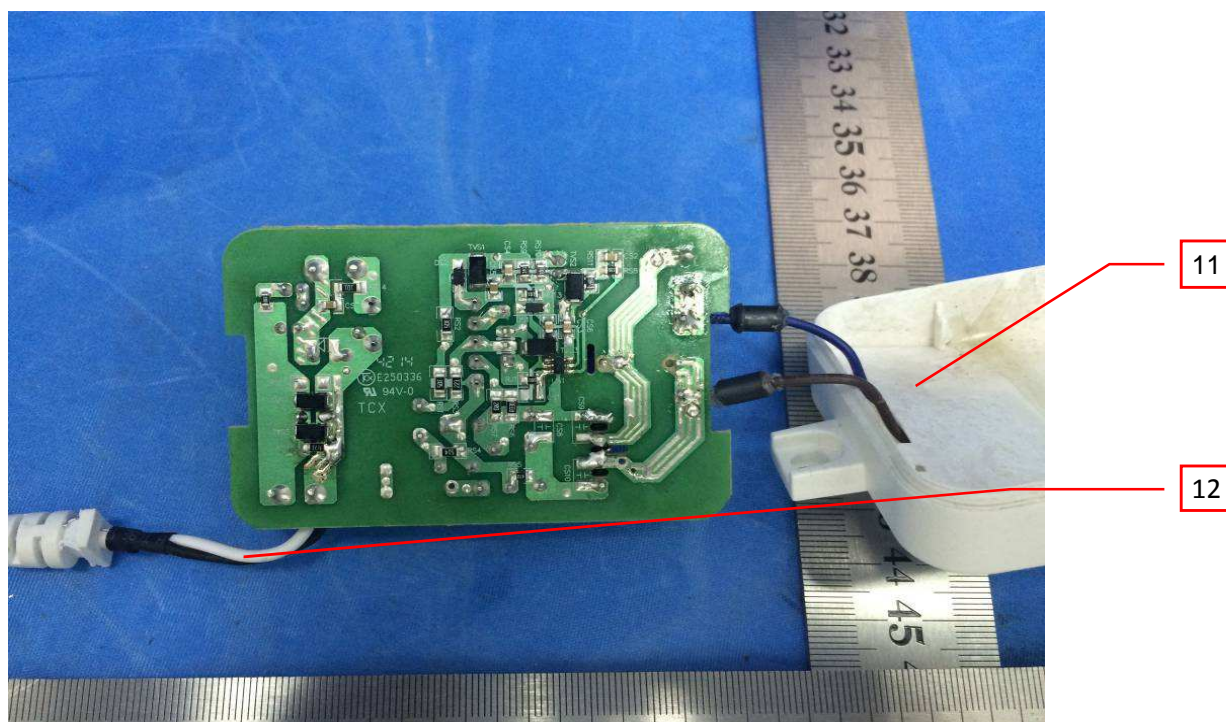


Photo 10 - Soldering side view of PCB of model GT-41134-0606-W2-TAB



3.0 Product Photographs

Photo 11 - Plug pin side view of NEMA 1-15P plug portion



Photo 12 - Connector side view of NEMA 1-15P plug portion



3.0 Product Photographs

Photo 13 - Overview for new added structure



Photo 14 - Internal view for new added structure



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, 2.0 mm minimum spacing are maintained through air between current-carrying parts of opposite polarity and 4.0 mm minimum between such current-carrying parts and dead-metal parts or low voltage isolated circuits. In primary circuits, 2.4 mm minimum spacing are maintained over surfaces of insulating material between current-carrying parts of opposite polarity and 4.8 mm minimum between such current-carrying parts and dead-metal parts or low voltage isolated circuits.
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 - For adapter models, all uninsulated live parts in primary circuitry are housed within a non-metallic enclosure constructed with no openings and metal enclosure earthed with ventilation holes other than those specifically described in Sections 4 and 5.
5. Grounding - All exposed dead-metal parts and all dead-metal parts within the enclosure that are exposed are connected to the grounding lead of the power supply cord and the equipment grounding terminal.
6. Polarized Connection - This product is provided with a polarized power supply connection.
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. UL approved wiring is used as secondary output lead wire of SELV circuits.
8. Schematics - Refer to Illustration No(s). 2a&2b&2c, 3a&3b&3c for schematics & PCB layout requiring verification during Field Representative Inspection Audits.
9. Markings - The product is marked as follows: brand name, model number, electrical ratings, manufacturer. Refer to Illustration No. 4 for details.
10. Cautionary Markings - Refer to illustrations No. 4 for details.
11. Safety Instructions - Instructions for installation and use of this product are provided by the manufacturer. They are kept in file and need not be repeated here.

7.0 Illustrations

Illustration 1 - Model list

Model	voltage	Max. current	Max. power
GT*41134**03** GT*96060**03**	3.3V	1.8A	6W
GT*41134**04** GT*96060**04**	3.4-4V	1.76A	6W
GT*41134**06** GT*96060**06**	4.1-6V	1.46A	6W
GT*41134**12** GT*96060**12**	6.1-12V	0.98A	6W
GT*41134**15** GT*96060**15**	12.1-15V	0.50A	6W
GT*41134**18** GT*96060**18**	15.1-18V	0.40A	6W
GT*41134**24** GT*96060**24**	18.1-24V	0.33A	6W
GT*41134**36** GT*96060**36**	24.1-36V	0.25A	6W
GT*41134**48** GT*96060**48**	36.1-48V	0.16A	6W
GT-41134-0606-W2-TAB	6V	1A	6W

7.0 Illustrations

Illustration 2a - Schematics

For GT-41134-0606-W2-TAB

7.0 Illustrations

Illustration 2b - Schematics
For GT*41134*** and GT*96060*******

7.0 Illustrations

Illustration 2c - Schematics

For new added structure of GT*41134*** and GT*96060*******

7.0 Illustrations

7.0 Illustrations

7.0 Illustrations

7.0 Illustrations

Illustration 4 - Marking

The marking plates of the other models listed in this report are identical with below except model name and output parameter.

For adapter model



Especially for North American model GT-41134-0606-W2-TAB



ETL Mark



Intertek
4007497

Conforms to UL STD 60950-1
Certified to CAN/CSA STD C22.2 No.60950-1

8.0 Test Summary					
Evaluation Period	2014-09-01 ~ 2014-10-13			Project No.	140900039SHA
Sample Rec. Date	28-Aug-2014	Condition	Prototype	Sample ID.	0140828-52-001
Test Location	Building No.86, 1198 Qinzhou Road (North), Shanghai 200233, 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			Standard for Safety for Information Technology Equipment Safety Part 1: General Requirements: (UL 60950-1 Issued: 2007/03/27 Ed:2 Rev: 2011/12/19 & CAN/CSA C22.2 No.60950-1 Issued: 2007/03/27 Ed:2 (R 2012) Rev: 2011/12/19)		
			Clause		
Input current test			1.6.2		
Marking durability test			1.7.11		
Energy hazard test			2.1.1.1		
Voltages under normal conditions test			2.2.2		
Voltages under fault conditions test			2.2.3		
Limited current circuit test			2.4		
Limited power source test			2.5		
Humidity test			2.9.2		
Working voltage measurement			2.10.2		
Clearances and creepage distances			2.10.3/2.10.4		
Distance through insulation measurement			2.10.5		
Mechanical strength - steady force test, 10 N			4.2.2		
Mechanical strength - steady force test, 250 N			4.2.4		
Strain on socket-outlet test			4.3.6		
Temperature test			4.5.1		
Ball pressure test of thermoplastic parts			4.5.5		
Touch current & protective conductor current test			5.1		
Electric strength test			5.2		
Abnormal operating and fault conditions test			5.3		

Evaluation Period	21-Oct-2015 to 15-Jan-2016			Project No.	151001355SHA
Sample Rec. Date	21-Oct-2015	Condition	Prototype	Sample ID.	0151021-56-001~009
Test Location	Building No.86, 1198 Qinzhou Road (North), Shanghai 200233, 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.					
Some tests have been evaluated in 140900039SHA-002 and some critical tests performed again in below updated standard:					
Test Description			UL 60950-1 Issued: 2007/03/27 Ed: 2 Rev: 2014/10/14 & CAN/CSA C22.2 No. 60950-1 Issued: 2007/03/27 Ed: 2 (R2012) Amd. 1: 2011, Amd. 2: 2014		
			Clause		
Input test			1.6.2		
Voltage under normal conditions test			2.2.2		
Voltage under fault conditions test			2.2.3		
Limited current circuits test			2.4		
Limited power sources test			2.5		
Determination of working voltage test			2.10.2		
Clearances measurement			2.10.3		
Creepage distances measurement			2.10.4		
Temperature tests			4.5.2		
Touch current test			5.1		
Electric strength test			5.2		
Abnormal operating and fault conditions test			5.3		

8.0 Test Summary

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:	Albert Zhou	Reviewed by:	Will Wang
Title:	Engineer	Title:	Supervisor
Signature:	<i>Albert Zhou</i>	Signature:	<i>Will Wang</i>

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	GlobTek, Inc.
Address	186 Veterans Dr. Northvale, NJ 07647 USA
Country	USA
Product	ITE Power Supply

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.

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.

Note to Intertek Follow Up Inspector: The Component Evaluation Center, CEC, will notify you in writing when these components must be selected and sent to the CEC for re-evaluation

Ship the samples to:
Intertek Testing Services Shanghai Limited
ETL Component Evaluation Center
Building No. 86, 1198 Qinzhou Road (North)
Shanghai 200233, China
Attn: Ms. Dansy Xu

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

Method

One hundred percent of production of the products covered by this Report shall be subjected to a routine production line dielectric withstand test.

The test shall be conducted on products, which are fully assembled. Prior to applying the test potential, all switches, contactors, relays, etc., should be closed so that all primary circuits are energized by the test potential. If all primary circuits cannot be tested at one time, then separate applications of the test potential shall be made.

The test voltage specified below shall be applied between primary circuits and accessible dead-metal parts. The test voltage may be gradually increased to the specified value but must be maintained at the specified value for one second or one minute as required.

Test Equipment

The test equipment shall incorporate a transformer with an essentially sinusoidal output, a means to indicate the applied test potential, and an audible and/or visual indicator of dielectric breakdown.

The test equipment shall incorporate a voltmeter in the output circuit to indicate directly the applied test potential if the rated output of the test equipment is less than 500VA.


If the rated output of the test equipment is 500VA or more, the applied test potential may be indicated by either:

- 1 - a voltmeter in the primary circuit;
- 2 - a selector switch marked to indicate the test potential; or
- 3 - a marking in a readily visible location to indicate the test potential for test equipment having a single test potential output.

In cases 2 and 3, the test equipment shall include a lamp or other visual means to indicate that the test potential is present at the test equipment output. All test equipment shall be maintained in current calibration.

Products Requiring Dielectric Voltage Withstand Test:

<u>Product</u>	<u>Test Voltage</u>	<u>Test Time</u>
Between L/N and secondary output	3000Vac	1 s

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
6-Apr-2016	Albert Zhou <i>Albert Zhou</i>	1	Std.	Updated standard version of UL 60950-1 from "Information Technology Equipment Safety Part 1: General Requirements: UL 60950-1 Issued: 2007/03/27 Ed:2 Rev: 2011/12/19" to "Information Technology Equipment Safety Part 1: General Requirements (UL 60950-1 Issued: 2007/03/27 Ed: 2 Rev: 2014/10/14)" Updated standard version of CAN/CSA C22.2 No.60950-1 from "Information Technology Equipment Safety Part 1: General Requirements: CAN/CSA C22.2 No.60950-1 Issued: 2007/03/27 Ed:2 (R 2012) Rev: 2011/12/19" to "Information Technology Equipment Safety Part 1: General Requirements (CAN/CSA C22.2 No. 60950-1 Issued: 2007/03/27 Ed: 2 (R2012) Amd. 1: 2011, Amd. 2: 2014)"
151001355SHA	Will Wang <i>Will Wang</i>	2	-	Replaced the trade mark "GlobTek" with "  Replaced the old naming model series GT*41134-*** with a new naming model series GT*41134****; Added new product model series: GT*96060****; Added new structure type for GT*41134**** and GT*96060****; Updated the explanation Model Similarity of model series; Added alternative input current 0.3A based on client's requirement;
		3, 4	-	Revised the photo number.
		3	13, 14	Added new photos for new added structure type which used in model series GT*41134**** and GT*96060****.
		4	1	Added new models "945" of enclosure manufactured by "SABIC INNOVATIVE PLASTICS B V"
		4	2	Added new models "02" of PCB manufactured by "CHEERFUL ELECTRONIC"
		4	4	Added new models "TF032", "TF033", "TF034" and "TF035" of transformer.
		7	1, 2a, 2c, 3c	Updated the model list; Added new circuit diagram and PWB layout.
		8	Std.	Updated standard version of UL 60950-1 and CAN/CSA C22.2 No.60950-1 from "UL 60950-1 Issued: 2007/03/27 Ed:2 Rev: 2011/12/19 & CAN/CSA C22.2 No.60950-1 Issued: 2007/03/27 Ed:2 (R 2012) Rev: 2011/12/19" to "UL 60950-1 Issued: 2007/03/27 Ed: 2 Rev: 2014/10/14 & CAN/CSA C22.2 No. 60950-1 Issued: 2007/03/27 Ed: 2 (R2012) Amd. 1: 2011, Amd. 2: 2014"
		8	-	Added new test block in section 8
		8.1	-	Revised with new signatures