

FOLLOW-UP SERVICE PROCEDURE
(TYPE L)STRINGS, DECORATIVE LIGHTING, LOW VOLTAGE
(DHAC)

Manufacturer:	SEE ADDENDUM FOR MANUFACTURER LOCATIONS
Applicant:	752086 (Party Site) ZHUHAI FUYU LIGHTING CO LTD Floor 2, South Factory Building Transportation General Company No 49, Guangxin Road, Pingsha Town Zhuhai Guangdong 519050 CN
	752086 (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 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) 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 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

752086 (Party Site)
ZHUHAI FUYU LIGHTING CO LTD
Floor 2, South Factory Building
Transportation General Company
No 49, Guangxin Road, Pingsha Town
Zhuhai Guangdong 519050 CN

Factory ID: None
UL Contracting Party for above site is: UL GmbH

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Products Covered	Sec. No.	Issued Date
Low Voltage Decorative Lighting Strings for Indoor and Outdoor Use, Models LTLED Series.	1	2021-09-09

Low Voltage Decorative Lighting String (DHAC)

APPENDIX A - FIELD ENGINEER'S RESPONSIBILITIES AND INSTRUCTIONS FOR
EXAMINATION OF THE PRODUCT

FIELD ENGINEER'S RESPONSIBILITIES

The Field Engineer's general responsibility, as part of the Follow-Up Services Procedure, are as noted in the published document titled "UL Mark Surveillance Requirements" and is available through UL's secure customer portal MyHome@UL.com and/or through UL's internet site www.UL.com. Manufacturers that do not have Internet access may obtain the current version of these requirements from their local UL Customer Service Representative or UL Field Engineer.

The construction of the lighting strings shall be verified in accordance with the requirements specified in the Section General and Descriptive pages. The construction of the lighting strings shall be verified by inspection and/or factory tests.

PROCEDURE IN THE EVENT OF NONCONFORMANCE

When a product does not comply with the Follow-Up Service Procedure require that the manufacturer implement appropriate action as outlined in the "UL Variation Notice and Corrective Action Requirements" document.

Low Voltage Decorative Lighting String (DHAC)

APPENDIX B - INSTRUCTIONS FOR FIELD ENGINEER'S SAMPLE SELECTION

FIELD ENGINEER:

Products covered by this Procedure employ constructions requiring Follow-Up tests at UL.

Twice a year, the UL Field Engineer shall randomly select two samples of any lighting string and forward samples to the test office. The Field Engineer should attempt to alternate sample selections from one sample selection to the next so that over a period of time, all constructions in the File have been represented by testing.

These samples are to be subjected to the tests as indicated in the last column of Table 1.

SAMPLE TAGS:

Samples shall be identified and tagged with the appropriate information such as the Model number and other descriptive information using Sample Tag (Form 3000-217). Unless otherwise stated, the Field Engineer shall inform the manufacturer that the samples are to be forwarded to the Test Office(s) as designated on the specific service profile. The sample shall be appropriately identified and the sample tag be marked "For VW-1 Flame Testing at UL".

Sample Selections

TABLE 1

Number of Samples	Type of Products	Required Test
2 Complete Strings	Series-Connected Lighting Strings	VW-1 Flame Test*

*These samples are not required if the lighting strings are in the secondary of a Class 2 circuit where the available power is less than 15 Watts and the insulation on the cord is less than 1/64 inch (0.4 mm).

Low Voltage Decorative Lighting Strings (DHAC)

APPENDIX C - INSTRUCTIONS FOR FOLLOW-UP TESTS AT UL

GENERAL:

The samples received by UL shall be subjected to the following test.

VW-1 FLAME TEST

Method

Three wire samples of suitable length taken from a representative series-connected Decorative Lighting String shall be subjected to this test in accordance with the requirements in UL62 and UL1581.

Basis for Acceptability

The test results shall conform to the requirements in the Referenced Standards.

PROCEDURE IN CASE OF NONCONFORMANCE

If nonconforming test results are reported, UL will require a written response from the subscriber that documents their investigation of the nonconformance and the corrective actions taken to prevent recurrence. A sample will be sent to the subscriber for their review if requested.

Low Voltage Decorative Lighting String (DHAC)

APPENDIX D - MANUFACTURER' S RESPONSIBILITIES, CONSTRUCTION CONSIDERATIONS,
AND REQUIREMENTS FOR FACTORY TESTS

The Follow-Up Service Procedure covering the product is loaned to the manufacturer and constitutes the basis on which the product is judged for compliance with the applicable requirements.

MANUFACTURER'S RESPONSIBILITIES

GENERAL

The Manufacturer's general responsibility, as part of the Follow-Up Services Procedure, are as noted in the published document titled, "UL Mark Surveillance Requirements", and is available through UL's secure customer portal MyHome@UL.com and/or through UL's internet site www.UL.com. Manufacturers that do not have Internet access may obtain the current version of these requirements from their local UL Customer Service Representative or UL Field Representative.

CONSTRUCTION CONSIDERATIONS

The manufacturer shall verify compliance with the applicable descriptions and requirements contained in this Procedure. Consideration shall also be given to the general requirements described below, which also apply to products covered in this Procedure. It is the manufacturers responsibility to assure that production complies with these requirements. Non-specified plastic materials may not be substituted for Procedure described materials.

MANUFACTURER'S 100% PRODUCTION-LINE TEST PROGRAM

LAMPING OPERATION TEST

Each lampholder of a lighting string shall be completely lamped and tested by the manufacturer. If any lamp does not light, the string shall be considered nonconforming and shall be reworked or have the Certification Mark removed. In place of lamping, the manufacturer may use an alternate method of testing each lampholder that produces results equivalent to actual lamping. The equivalence of alternate test methods is to be determined by UL and, if acceptable, the alternate test method shall be described in this Procedure.

Low Voltage Decorative Lighting String (DHAC)

MANUFACTURER'S PERIODIC PRODUCTION-LINE TESTS:

A set of each type of string is to be selected from each production lot and subjected to the test shown in item A, below.

If acceptable results are obtained on the unit selected, the lot is acceptable. If there is one nonconforming unit in the set of samples, select a second set of the additional unit from the same lot and subject them to the entire test again.

If there is more than one nonconforming unit in the first set of samples, or if there are one or more nonconforming units in the second set of samples, the lot is rejected and may not be shipped bearing the UL Mark. Rejected lots may be culled, reworked and submitted for reinspection.

Low Voltage Decorative Lighting String (DHAC)

- A. DOWNWARD BURNING RATE TEST (Conducted on parts that described to comply with this test; one Test per Material):

Method

A decorative part is to be supported on a noncombustible surface in a draft-free location with the specimen oriented so as to place one of the major surfaces of the part in a substantially vertical plane. The uppermost edge or surface is then to be ignited through the use of any convenient ignition source such as an ordinary paper book match or lighter. In the case of a molded form or figure not having an exposed edge, it may be necessary to cut a slit or opening in the desired ignition area. Once the part has ignited, the ignition flame is to be removed and the vertical downward burning rate is to be determined.

If the decorative part consists of a combination of two or more materials, the burning rate is to be determined on the combination unless it is determined that each material, when tested by itself, complies with the maximum acceptable burning rate.

Basis for Acceptability

The vertical downward burning rate shall not exceed 4 in. (102 mm) per minute as determined by the following formula:

$$\text{DBR} = \frac{L_1 - L_2 \text{ in inches or mm}}{\text{Duration of flaming in seconds}} \times 60 \frac{\text{sec}}{\text{min}}$$

Where:

DBR is the Downward Burning Rate in in./min or mm/min

L_1 is the length of the specimen before test in in. or mm

L_2 is the length of the specimen after test in in. or mm

Low Voltage Decorative Lighting String (DHAC)

If repeated attempts to ignite the material (for example, three consecutive attempts of 10-15 second applications) do not result in sustained flaming or, if the flame extinguishes is less time than specified below for the given sample length, the material is also acceptable.

Test Specimen Length		Minimum Burning Time
Inches	Millimeters	Before Complete Consumption Seconds
1	25.4	15
2	50.8	30
3	76.2	45
4	101.5	60

NOTE: The given specimen lengths are examples only. Other specimen lengths not shown in the table may be tested and the downward burning rate computed using the formula above.

CERTIFICATE OF COMPLIANCE

Certificate Number E522222
Report Reference E522222-2021-09-09
Date 2021-September-10

Issued to: ZHUHAI FUYU LIGHTING CO LTD
Floor 2, South Factory Building
Transportation General Company
No 49, Guangxin Road, Pingsha Town
Zhuhai Guangdong 519050 CN

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

STRINGS, DECORATIVE LIGHTING, LOW VOLTAGE
Low Voltage Decorative Lighting Strings for Indoor and
Outdoor Use, Models LTLED Series.

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

Standard(s) for Safety: UL 588, Seasonal and Holiday Decorative Products

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.

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



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/>



File E522222
Project 4789938090

September 9, 2021

REPORT

on

STRINGS, DECORATIVE-LIGHTING, LOW VOLTAGE

ZHUHAI FUYU LIGHTING CO LTD
Zhuhai, Guangdong, China

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DESCRIPTION

PRODUCT COVERED:

Low Voltage Decorative Lighting Strings for Indoor and Outdoor Use,
Models LTLED Series.

See Nomenclature and Electrical Ratings for detailed model designation
of all models listed above.

NOMENCLATURE:

<u>LTLED</u>	-	<u>H</u>	<u>29V</u>	<u>14.5W</u>	<u>0.5A</u>	<u>360</u>
A		B	C	D	E	F

Where:

A =	Model series.
B =	May be "H" for non-replaceable lampholder assembly or "Z" for replaceable lampholder assembly
C =	Rated output voltage of Class 2 power supply
D =	Rated input wattage of the product
E =	Rated input current of the product
F =	Total number of lamps

TECHNICAL CONSIDERATIONS (NOT FOR FIELD ENGINEER'S USE):

These products are for use with a maximum input voltage rating of 120 V,
60 Hz, and are for temporary use, which is a period of installation and use
not exceeding 90 days.

These products consist of a Listed EPBU Class 2 Power Unit and various
LED lampholder assemblies. The maximum current draw of the power supply is
limited by the power supply.

**There products have been investigated using US requirements as noted in
the Test Record.**

CONSTRUCTION DETAILS:

SPARE LAMPS: Each product employing LED push-in type lamps shall be provided with at least two (2) spare lamps. The spare lamps shall be of the same type as provided in the product.

MARKINGS:

The height of lettering of the required markings shall be as follows:

- a) Upper case letters shall not be less than 1/12 inch (2.1 mm) in height.
- b) Lower case letters shall not be less than 1/16 inch (1.6 mm) in height.
- c) The words "CAUTION" and "WARNING" shall be in letters not less than 3/16 inch (4.8 mm) in height.

The required markings shall be legible and shall comply with the following:

The marking shall be indelibly stamped or printed black on a white R/C (PGIS2) that complies with UL 817 flag-type tag with adhesive back.

Cord Tag Markings - Markings located on a tag as described below may continue on the second side of the tag, such that when the first side is read completely, the tag is to be turned over to read the remainder of the marking. At the end of the markings on the first side of the tag, the tag shall be marked: "See other side." Before the remainder of the required markings on the second side of the tag, the tag shall be marked: "Continued from other side." The word "CAUTION" may appear only once at the beginning of the marking, followed by a numbered list.

The markings specified below shall be located on a tag attached to the product within 6 inches (152.4 mm) of the exit of the power supply.

See Ill. 1 for the wording and layout of the Cord Tag. Cord Tag #S01 is for Models employing with replaceable LED lamps; Cord Tag #S02 is for Models employing with non-replaceable LED lamps. The Cord Tag shall be filled in appropriately according to the notes in Ill. 1.

PACKAGING MARKINGS:

Each individual carton or container in which a product is packaged shall be marked, where readily visible without opening the package with the following or the equivalent:

"For Indoor and Outdoor Use", "Indoor and Outdoor Use", "Indoor and Outdoor" when the product is intended for indoor and outdoor use.

The location of the Markings shall comply with one of the following:

- a) When packaged in a carton, the Marking shall appear on the outside front cover.
- b) When packaged in a bag, the Marking shall appear on two opposing sides of the bag. If the bag is opaque the letters shall be printed on a high contrast background. If the bag is transparent, the letters shall be printed in black on a white opaque background.
- c) When packaged in a bag attached to a piece of cardboard, the Marking shall appear on both sides of the cardboard.
- d) When packaged in a transparent polymeric covering attached to cardboard, the Marking shall appear on the front of the package, on the cardboard.

The height of lettering of the above required Markings shall be as follows:

- a) Upper case letters shall not be less than 1/12 inch (2.1 mm) in height.
- b) Lower case letters shall not be less than 1/16 inch (1.6 mm) in height.

The required Markings shall be legible and the letters shall be on a high contrast background except when packaged in a transparent bag, in which case, the letters shall be printed in black on a white opaque background.

The required Marking shall be durable, legible, and permanent. A Marking shall be considered permanent if it is indelibly stamped or printed on the packaging or on a pressure sensitive adhesive-backed label.

INSTRUCTION MANUAL:

The height of the lettering in the text and illustrations of the instructions specified below shall be as follows:

- a) Upper case letter shall not be less than 1/12 inch (2.1 mm) in height.
- b) Lower case letters shall not be less than 1/16 inch (1.6 mm) in height.
- c) The phrases "IMPORTANT SAFETY INSTRUCTIONS," "READ AND FOLLOW ALL SAFETY INSTRUCTIONS" and "SAVE THESE INSTRUCTIONS" shall be in letters not less than 3/16 inch (4.8 mm) in height.

The items may be numbered. The phrases "READ AND FOLLOW ALL SAFETY INSTRUCTIONS" and "SAVE THESE INSTRUCTIONS" shall be first and last, respectively, in a list of items. Other important safety instruction items considered appropriate by the manufacturer may be inserted.

The following instructions shall be provided on a stuffer sheet, on the outside surface of the carton of the product or in an instruction manual of the product:

See Ills. 2 and 3 for the wording and layout of the Instruction Manual. Ill. 2 is for Models employing with replaceable LED lamps; Ill. 3 is for Models employing with non-replaceable LED lamps. The Instruction Manual shall be filled in appropriately according to the notes in Ills. 2 and 3.

ELECTRICAL RATINGS:

120 V, 60 Hz. See Table 1 for Input Ratings.

Table 1

Model No.	No. of Total Lamps	Cat. No. of Class 2 Power Supply	Total Input Ratings	
			Current, A	Power, W
LTLED-H29V14.5W0.5AXXX	360-600	MLS-D29V14.5WUD-O	0.5	14.5
LTLED-H12V9W0.75AXXX	240-400	MLS-D12V9WUD-O	0.75	9
LTLED-D12V3.6W0.3AXXX	12-200	MLS-D12V3.6WUD-O	0.25	4.8
LTLED-D12V6W0.5AXXX	150-300	MLS-D12V6WUD-O	0.25	7.7
LTLED-D12V9W0.75A	250-450	MLS-D12V9WUD-O	0.25	11.2
LTLED-D12V12W1A	300-650	MLS-D12V12WUD-O	0.3	15
LTLED-D30V3.6W0.12A	10-150	JT-DC300V0120-C	0.12	3.6
LTLED-D12V3.6W0.3A	12-150	JT-DC120V0300-C	0.3	3.6
LTLED-D30V6W0.2A	100-300	JT-DC300V0200-C	0.2	6
LTLED-D12V6W0.5A	100-300	JT-DC120V0500-C	0.5	6
LTLED-D30V8.4W0.28A	250-400	JT-DC300V0280-D	0.28	8.4
LTLED-D30V12W0.4A	300-700	JT-DC300V0400-F	0.4	12
LTLED-D12V8.4W0.7A	250-400	JT-DC120V0700-D	0.7	8.4
LTLED-D12V12W1A	300-650	JT-DC120V1000-F	1	12

Notes for Table 1:

- Individual Model Nos. are not provided in Table 1, but are referred to by Nomenclature designations only. See additional notes below for details.
- "H" may be replaced by "Z".
- Where "XXX" shall be total number of lamps.

Table 2 - LED Ratings

LED Colors	Lamp Ratings		
	Voltage, V	Power, W	Current, mA
Red, Yellow, Orange	2	0.04	20
Blue, Green, White, Warm White, Purple, Pink	3	0.06	20

LOW VOLTAGE DECORATIVE LIGHTING STRINGS
MODELS LTLED SERIES
(REPRESENTS ALL MODELS IN TABLE 1)

FIGS. 1-2

General - Fig. 1 shows the overall construction of Models LTLED-Z Series. Fig. 2 shows the overall construction of Models LTLED-H Series.

1. Class 2 Power Supply - Listed (EPBU) manufactured by ZhongShan MLS Photoelectric Co., Ltd. (E503846), for indoor and outdoor use. See Table 3 for rating details. Secured to flexible cord via a male connector and a locking nut that comply with Downward Burning Rate Test.

Alternate - Same as above except Listed (EPBU), manufactured by Changzhou Jutai Electronic Co., Ltd. (E200916).

Table 3

Model No.	Rated Input Current, A	Rated Output Voltage, V	Rated output Current, A
MLS-D29V14.5WUD-O	0.55	29	0.5
MLS-D12V9WUD-O	0.25	12	0.75
MLS-D12V3.6WUD-O	0.25	12	3.6
MLS-D12V6WUD-O	0.25	12	6
MLS-D12V9WUD-O	0.25	12	9
MLS-D12V12WUD-O	0.25	12	12
JT-DC300V0120-C	0.2	30	0.12
JT-DC300V0200-C	0.2	30	0.2
JT-DC300V0280-D	0.3	30	0.28
JT-DC300V0400-F	0.5	30	0.4
JT-DC120V0300-C	0.2	12	0.3
JT-DC120V0500-C	0.2	12	0.5
JT-DC120V0700-D	0.3	12	0.7
JT-DC120V1000-F	0.5	12	1

2. Power Supply Leads - R/C AVL2, AWM, style 1007, 24 AWG, insulation thickness min. 0.4 mm, rated VW-1.
3. Lampholder Assembly - (For Models LTLED-H series) Non-replaceable type, each consists of barrier, heat shrinkable tube and 3/5 mm OD LED lamp. See Table 2 for LED lamp details. Formed of materials which comply with Downward Burning Rate Test.

Alternate - (For Models LTLED-Z series) Replaceable type, each consists of lampholder husk, lamp base, contacts and 3/5 mm OD LED lamp. May be provided in various sizes and shapes with two or three lead construction. See Table 2 for LED lamp details. Formed of materials which comply with Downward Burning Rate Test.

4. Cord Tag - PGIS2, Marking and Labeling System identified as complying with UL 817 or UL 588 requirements and suitable for outdoor use. The tag shall be a flag-type tag with an adhesive back. The tag is to be wrapped once tightly around and adhered to the wire. The ends of the tag are to adhere to each other and project as a flag. Markings are printed in black on a white background. For required markings, letter height and location, see construction details, markings.





Indoor and Outdoor Use – tag to be located within 6 inches (152.4 mm) of the exit of the power supply.

Cord Tag. # SO1 – Indoor and Outdoor Use, Class 2 power supply, replaceable lamps:

CAUTION 1. For temporary (90 days max) installation and use only. 2. For indoor and outdoor use. 3. To reduce the likelihood of excessive heat and possible damage, use only decorative lamp accessories packaged with this product. 4. Always unplug this product before installing or replacing lamps. See other side	Continued from other side 5. To reduce the risk of fire and electric shock, use only the power supply Model <u>(i)</u> mfd. by <u>(J)</u> that was provided with this product. 6. Replace lamps only with <u>(a)</u> volt, <u>(b)</u> watt spare lamps provided with this product. 7. This is a series-connected lighting string. E <u>(c)</u> Model <u>(d)</u> , 120 V, 60 Hz, <u>(e)</u> A, <u>(f)</u> Watts, <u>(g)</u> <u>(h)</u>
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Cord Tag. # SO2 – Indoor and Outdoor Use, Class 2 power supply, non-replaceable lamps:

CAUTION 1. For temporary (90 days max) installation and use only. 2. For indoor and outdoor use. 3. To reduce the likelihood of excessive heat and possible damage, use only decorative lamp accessories packaged with this product. 4. To reduce the risk See other side	Continued from other side of fire or electric shock, do not attempt to replace lamps or modify string. 5. To reduce the risk of fire and electric shock, use only the power supply Model <u>(i)</u> mfd. by <u>(J)</u> that was provided with this product. 6. This is a series-connected lighting string. E <u>(c)</u> Model <u>(d)</u> , 120 V, 60 Hz, <u>(e)</u> A, <u>(f)</u> Watts, <u>(g)</u> <u>(h)</u>
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Notes – applies to all markings above:

1. The blank (a) shall be filled in with the voltage value of the replacement lamps.
2. The blank (b) shall be filled in with the wattage of the replacement lamps.
3. The blank (c) shall be filled in with the File No., Listee name or trademark.
4. The blank (d) shall be filled in with a distinctive catalog number.
5. The blank (e) shall be filled in with the rated input current.
6. The blank (f) shall be filled in with the rated input wattage.
7. The blank (g) shall be filled in with the date code of manufacture.
8. The blank (h) shall be filled in with the factory ID code, as indicated in Authorization Page.
9. The blank (i) shall be filled in with the Model No. of the power supply provided with the product.
10. The blank (J) shall be filled in with the Listee name of the power supply provided with the product.
11. The wording "For temporary (90 days max) installation and use only." may be replaced by "This seasonal product is not intended for permanent installation. "

IMPORTANT SAFETY INSTRUCTIONS

When using electrical products, basic precautions should always be followed including the following:

- a) **READ AND FOLLOW ALL SAFETY INSTRUCTIONS.**
- b) Do not use seasonal products outdoors unless marked suitable for indoor and outdoor use. When products are used in outdoor applications, connect the product to a Ground Fault Circuit Interrupting (GFCI) outlet. If one is not provided, contact a qualified electrician for proper installation.
- c) This seasonal use product is not intended for permanent installation or use.
- d) Do not mount or place near gas or electric heaters, fireplace, candles or other similar sources of heat.
- e) Do not secure the wiring of the product with staples or nails, or place on sharp hooks or nails.
- f) Do not let lamps rest on the supply cord or on any wire.
- g) Unplug the product when leaving the house, when retiring for the night, or if left unattended.
- h) This is an electric product-not a toy! To avoid risk of fire, burns, personal injury and electric shock it should not be played with or placed where small children can reach it.
- i) Do not use this product for other than its intended use.
- j) Do not hang ornaments or other objects from cord, wire, or light string.
- k) Do not close doors or windows on the product or extension cords as this may damage the wire insulation.
- l) Do not cover the product with cloth, paper or any material not part of the product when in use.
- m) This product is equipped with push-in type lamps. Do not twist lamps.
- n) Read and follow all instructions that are on the product or provided with the product.

SAVE THESE INSTRUCTIONS

Use and Care Instructions

- a) When the product is placed on a live tree, the tree should be well maintained and fresh. Do not place on live trees in which the needles are brown or break off easily. Keep the tree holder filled with water.
- b) If the product is placed on a tree, the tree should be well secured and stable.
- c) Before using or reusing, inspect product carefully. Discard any products that have cut, damaged, or frayed wire insulation or cords, cracks in the lampholders or enclosures, loose connections, or exposed copper wire.
- d) When storing the product, carefully remove the product from wherever it is placed, including tree, branches, or bushes, to avoid any undue strain or stress on the product conductors, connections, and wires.
- e) When not in use, store neatly in a cool, dry location protected from sunlight.

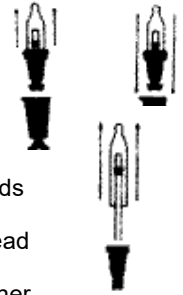
Note:

1. The blanks (a) and (b) shall be filled in with the voltage and wattage values, respectively, of the replacement lamps.

User Servicing Instructions

Replace the lamp.

- a) Grasp plug and remove from the receptacle or other outlet device. Do not unplug by pulling on cord.
- b) Pull lamp and plastic base straight out of lampholder.
- c) Replace lamp with only (a) Volt, (b) Watt, LED type lamp (provided with product).



If the new lamp base does not fit in lampholder, follow the steps below before step 3.

1. Remove the base of burned out lamp by straightening lamp leads gently pull lamp out.
2. Thread leads of new lamp through holes in old base with one lead each hole.
3. After lamp is fully inserted into base, bend each lead up, like other lamps in the light set so that the leads will touch the contacts inside the lampholder.

CAUTION

1. Risk of fire. This product does not contain lamp shunts, which allow the product to operate if one lamp burns out. Replace lamps only with the spare lamps provided with this product.
2. To reduce the risk of fire and electric shock: a) Do not install on trees having needles, leaves or branch coverings of metal or materials which look like metal, and b) Do not mount or support strings in a manner that can cut or damage wire insulation.

Model No. _____

IMPORTANT SAFETY INSTRUCTIONS

When using electrical products, basic precautions should always be followed including the following:

- a) **READ AND FOLLOW ALL SAFETY INSTRUCTIONS.**
- b) Do not use seasonal products outdoors unless marked suitable for indoor and outdoor use. When products are used in outdoor applications, connect the product to a Ground Fault Circuit Interrupting (GFCI) outlet. If one is not provided, contact a qualified electrician for proper installation.
- c) This seasonal use product is not intended for permanent installation or use.
- d) Do not mount or place near gas or electric heaters, fireplace, candles or other similar sources of heat.
- e) Do not secure the wiring of the product with staples or nails, or place on sharp hooks or nails.
- f) Do not let lamps rest on the supply cord or on any wire.
- g) Unplug the product when leaving the house, when retiring for the night, or if left unattended.
- h) This is an electric product-not a toy! To avoid risk of fire, burns, personal injury and electric shock it should not be played with or placed where small children can reach it.
- i) Do not use this product for other than its intended use.
- j) Do not hang ornaments or other objects from cord, wire, or light string.
- k) Do not close doors or windows on the product or extension cords as this may damage the wire insulation.
- l) Do not cover the product with cloth, paper or any material not part of the product when in use.
- m) Read and follow all instructions that are on the product or provided with the product.
- n) **SAVE THESE INSTRUCTIONS**

Use and Care Instructions

- a) When the product is placed on a live tree, the tree should be well maintained and fresh. Do not place on live trees in which the needles are brown or break off easily. Keep the tree holder filled with water.
- b) If the product is placed on a tree, the tree should be well secured and stable.
- c) Before using or reusing, inspect product carefully. Discard any products that have cut, damaged, or frayed wire insulation or cords, cracks in the lampholders or enclosures, loose connections, or exposed copper wire.
- d) When storing the product, carefully remove the product from wherever it is placed, including tree, branches, or bushes, to avoid any undue strain or stress on the product conductors, connections, and wires.
- e) When not in use, store neatly in a cool, dry location protected from sunlight.

CAUTION

- 1. To reduce the risk of fire or electric shock, do not attempt to replace lamps or modify string.
- 2. To reduce the risk of fire and electric shock: a) Do not install on trees having needles, leaves or branch coverings of metal or materials which look like metal, and b) Do not mount or support strings in a manner that can cut or damage wire insulation.

Model No. _____

TEST RECORD NO. 1

The products indicated below and constructed as described herein, were submitted by the manufacturer for examination and test.

Low Voltage Decorative Lighting Strings, Models LTLED Series.

Models LTLED-H29V14.5W0.5A600, LTLED-H12V9W0.75A400, LTLED-Z29V14.5W0.5A600 and LTLED-Z12V9W0.75A400 were used for investigation purposes and were considered representative of the entire series.

The following tests were conducted:

TEST	STANDARD	CLAUSE
Input Test	UL 588	42
Temperature Test	UL 588	43
Component Power Measurement Test	UL 588	49
Downward Burning Rate Test	UL 588	50

Test results relate only to the items tested.

Test Record Summary:

The results of this investigation, including construction review and testing, indicate that the products evaluated comply with the applicable requirements in the standard noted below and, therefore, such products are judged eligible to bear UL's Mark as described on the Conclusion Page of this Report.

Standard	Title	Edition	Publication or Revision Date
UL 588	Seasonal and Holiday Decorative Products	19th	2021-02-08

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

TEST RECORD NO. 2

The products indicated below and constructed as described herein, were submitted by the manufacturer for examination and test.

Alternate Class 2 power units to Models LTLED Series.

Models LTLED-D12V3.6W0.3A12, LTLED-D12V3.6W0.3A200, LTLED-D12V6W0.5A150, LTLED-D12V6W0.5A300, LTLED-D12V9W0.75A250, LTLED-D12V9W0.75A450, LTLED-D12V12W1A300, LTLED-D12V12W1A650, LTLED-D30V3.6W0.12A10, LTLED-D30V3.6W0.12A150, LTLED-D30V6W0.2A100, LTLED-D30V6W0.2A300, LTLED-D30V8.4W0.28A250, LTLED-D30V8.4W0.28A400, LTLED-D30V12W0.4A300, LTLED-D30V12W0.4A700, LTLED-D12V3.6W0.3A12, LTLED-D12V3.6W0.3A150, LTLED-D12V6W0.5A100, LTLED-D12V6W0.5A300, LTLED-D12V8.4W0.7A250, LTLED-D12V8.4W0.7A400, LTLED-D12V12W1A300, LTLED-D12V12W1A650, and Class 2 power unit Models MLS-D12V3.6WUD-O, MLS-D12V6WUD-O, MLS-D12V9WUD-O, MLS-D12V12WUD-O, JT-DC300V0120-C, JT-DC300V0200-C, JT-DC300V0280-D, JT-DC300V0400-F, JT-DC120V0300-C, JT-DC120V0500-C, JT-DC120V0700-D, JT-DC120V1000-F were used for investigation purposes and were considered representative of the entire series.

The following tests were conducted:

TEST	STANDARD	CLAUSE
Input Test	UL 588	42
Temperature Test	UL 588	43
Component Power Measurement Test	UL 588	49

Test results relate only to the items tested.

Test Record Summary:

The results of this investigation, including construction review and testing, indicate that the products evaluated comply with the applicable requirements in the standard noted below and, therefore, such products are judged eligible to bear UL's Mark as described on the Conclusion Page of this Report.

Standard	Title	Edition	Publication or Revision Date
UL 588	Seasonal and Holiday Decorative Products	19th	2021-10-27

Test Record by:

Reviewed by:

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

CONCLUSION

Samples of the products covered by this Report have been found to comply with the requirements covering the category and the products are found to comply with UL's applicable requirements. The description and test result in this Report are only applicable to the samples investigated by UL and does not signify UL certification or that the products described are covered under UL's Follow-Up Service Program. When covered under UL's Follow-Up Service Program, the manufacturer is authorized to use the Certification Mark of UL on such products which comply with UL's Follow-Up Service Procedure and any other applicable requirements of UL LLC. The Certification Mark of UL on the product, or the UL symbol on the product and the Certification Mark of UL on the smallest unit container in which the product is packaged, is the only method to identify products investigated by UL to published requirements and manufactured under UL's Listing and Follow-Up Service.

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