

TEST REPORT
UL 588
STANDARD FOR SAFETY
Seasonal and Holiday Decorative Products

Report Number.....: D240809016

Date of issue.....: 2024-08-13

Total number of pages: 18

Testing Laboratory.....: Dongguan Hongnuo Product Testing Service Co., Ltd

Address.....: No. 8, Jinqianling Wujie, Huangjiang, Dongguan, Guangdong, China
:

Applicant's name.....: Heyuan Limei Tree and Light Technology Co.,Ltd

Address.....: No.01 National Road, Longling Industrial Park,Yuancheng District, Heyuan City

Test specification: This test report form is based on the following requirements:

Standard.....: Seasonal and Holiday Decorative Products [UL 588]

Test procedure.....: Safety report

Non-standard test method.....: N/A

Test sample.....: Christmas tree

Trade Mark.....: Lixhey

Manufacturer.....: Same as applicant

Model/Type reference : PNS06-751T-300LRGB, PNS07-1063T-400LRGB,PNS09-1721T-620LRGB

Ratings : INPUT:100-120V-50/60Hz, 3.1A(MAX)

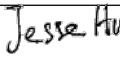
General disclaimer:

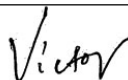
The test results presented in this report relate only to the object tested.

This report shall not be reproduced, except in full, without the written approval of the Issuing Testing Laboratory. The authenticity of this Test Report and its contents can be verified by contacting the Testing Laboratory, responsible for this Test Report.

☒	Testing Laboratory:	Dongguan Hongnuo Product Testing Service Co., Ltd
-------------------------------------	----------------------------	---

Testing location/ address.....	No. 8, Jinqianling Wujie, Huangjiang, Dongguan, Guangdong, China
---------------------------------------	--

Tested by (name, function, signature).....	Jesse Hu 
---	---

Approved by (name, function, signature)...	Victor Meng 
---	--



Copy of marking plate:

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



lixhey

Christmas tree

MODEL: PNS09-1721T-620LRGB

INPUT:100-120V~50/60Hz, 3.1A(MAX)

CONFORMS TO UL STD.588

MANUFACTURER: Heyuan Limei Tree
and Light Technology Co.,Ltd.

PRODUCING DATE:2024/01

MADE IN CHINA

CAUTION

Seasonal light warning:
This seasonal product is not
intended for permanent
installation.

Products with decorations:
"CAUTION To reduce the
likelihood of excessive
heat and possible damage,
use only decorative lamp
accessories packaged
with this product."



List of Attachments (including a total number of pages in each attachment):

NA

Possible test case verdicts:

- test case does not apply to the test object.....: N/A
- test object does meet the requirement.....: P (Pass)
- test object does not meet the requirement.....: F (Fail)

Testing:

Date of receipt of test item.....: 2024-08-01

Date (s) of performance of tests.....: 2024-08-01 to 2024-08-13

General product information:

- The product is with a length of flexible cord assembled with a battery compartment.
- The product is for indoor use and provided with manual.
- Test Model

Model	Input Rating	Number of bulbs	Size	Photo
PNS06-751T-300LRGB	100-120V-50/60Hz, 3.1A(MAX)	300	H: 180cm φ:40cm	
PNS07-1063T-400LRGB	100-120V-50/60Hz, 3.1A(MAX)	400	H: 210cm φ:46cm	
PNS09-1721T-620LRGB	100-120V-50/60Hz, 3.1A(MAX)	620	H: 270cm φ:54cm	

INTRODUCTION			
1	Scope		P
2	Glossary		P
3	Components		P
4	Units of Measurement		P
5	References		P

CONSTRUCTION			
ALL PRODUCTS			
6	General		P
7	Overcurrent Protection		P
8	Materials		P
9	Mechanical Assembly		P
10	Enclosures		P
10.1	General		P
10.2	Metallic enclosures		N/A
10.3	Polymeric enclosure		P
11	Enclosure Openings		N/A
12	Accessibility of Live Parts		N/A
13	Supply Connections		P
13.1	General		N/A
13.2	Cords		P
13.3	Wiring devices		N/A
13.4	Polarization		P
13.5	Grounding		N/A
14	Terminals and Conductive Parts		P
15	Strain Relief		N/A
16	Spacings		P
17	Splices		N/A
18	Class 2 Circuits		N/A
19	Switches		P
20	Printed Wiring Boards		P
21	Bushings		N/A
22	Lampholders		N/A
22.1	General		N/A
22.2	Series-connected		N/A
22.3	Parallel-connected		N/A

23	Lamps		P
24	Lamping		N/A
25	Fuseholders and Fused Attachment Plugs		N/A
26	Devices Employing Insulation-Piercing Terminals		N/A
27	Outdoor-Use Products		N/A
SERIES-CONNECTED STRINGS			N/A
28	General		N/A
PARALLEL-CONNECTED STRINGS			P
29	General		P
DECORATIVE LIGHTING HARNESSSES			N/A
30	General		N/A
DECORATIVE OUTFITS			P
31	General		P
32	Motorized Devices.		N/A
33	Light Sculptures		N/A
DIRECT PLUG-IN UNITS			N/A
34	General		N/A
ORNAMENTS			N/A
35	General		N/A
BATTERY OPERATED PRODUCTS			P
36	General		P

PERFORMANCE			
GENERALP			
37	Cheesecloth Indicators		P
38	Test Sequences		P
ALL PRODUCTS EXCEPT ORNAMENTS			
39	General		N/A
40	Leakage Current Test		P
41	Leakage Current Following Humidity Conditioning		P
42	Input Test		P
43	Temperature Test		P
44	Mounting Position Test		P
45	Dielectric Voltage-Withstand Test		P
46	Strain Relief Test		N/A
47	Wire Push-Back Relief Test		N/A
48	Abnormal Operation Test		N/A
49	Component Power Measurement Test		N/A

50	Downward Burning Rate Test		P
51	Conductivity of Decorative Parts Test		P
52	Routine Flexing Test		N/A
53	Slip-Ring Endurance Test		N/A
54	Temperature Tests for Devices Employing Insulation-Piercing Terminals		N/A
54.1	General		N/A
54.2	Temperature test		N/A
54.3	Thermal cycling		N/A
54.4	Strain relief/terminal temperature		N/A
55	Abnormal Tests for Controllers		N/A
55.1	General		N/A
55.2	Abnormal operation test		N/A
55.3	Overload test		N/A
56	Tests for Permanence of Cord Tag		P
56.1	General		P
56.2	Test conditions		P
56.3	Test method		P
PRODUCTS EMPLOYING POLYMERIC ENCLOSURES			N/A
57	General		N/A
58	Enclosure Mold Stress Relief Test		N/A
59	Drop Test		N/A
60	Impact Test		N/A
61	Cold Impact Test		N/A
62	Resistance to Crushing Test		N/A
63	Adhesive Test		N/A
PRODUCTS EMPLOYING OVERCURRENT PROTECTIVE DEVICES			N/A
64	General		N/A
65	Calibration Test		N/A
66	Fault Current Test		N/A
67	Fuseholder Temperature Test		N/A
68	Fuseholder Crush Test		N/A
69	Fuseholder Cover Test		N/A
PRODUCTS EMPLOYING CORD-CONNECTED WIRING DEVICES OR POWER INLETS			N/A
70	General		N/A
71	Strain Relief Test		N/A
72	Reliability of Conductor Connections Test		N/A
73	Security of Blades Test		N/A
74	Security of Input Contacts Test		N/A
75	Security of Insulation Test		N/A

76	Accessibility Test		N/A
PRODUCTS EMPLOYING SERIES-CONNECTED LAMPHOLDERS			N/A
77	General		N/A
78	Oven Test		N/A
79	Lampholder Strain Relief Tests		N/A
79.1	Lead pull test		N/A
79.2	Secureness of leads test		N/A
80	Secureness of Lampholder Contacts Test		N/A
81	Lampholder Millivolt Drop Test		N/A
82	Rope Strength Test		N/A
83	Crush Test		N/A
84	Cascade Lamp Burnout Simulation Test.		N/A
PRODUCTS PROVIDED WITH SELF-SHORTING CONTACTS			N/A
85	Cascading Lamp Temperature Test		N/A
86	Cycling Test		N/A
87	Input Test		N/A
PRODUCTS INTENDED FOR OUTDOOR USE			N/A
88	General		N/A
89	Rain Test		N/A
90	Rain Test For Series-Connected Lighting Strings		N/A
91	Standing Water Immersion Test		N/A
92	Gasket Test		N/A
93	Gasket Adhesion Test		N/A
94	Ultraviolet (UV) Light Exposure and Water Immersion Tests		N/A
94.1	General		N/A
94.2	UV conditioning		N/A
94.3	Water immersion		N/A
DECORATIVE LIGHTING STRINGS			P
95	Flexing Test		P
96	Decorative Lighting String Intended for Use on a Patio Umbrella		N/A
97	Temperature Test After Flexing		P
TREE STANDS			P
98	General		P
99	Stability Test		P
100	Overflow Test		N/A
DIRECT PLUG-IN UNITS			N/A
101	General		N/A
ELECTRONICALLY-OPERATED ORNAMENTS			P
102	General		P

103	Leakage Current Test		P
104	Temperature Test at 200 mA (Electronically-Operated)		P
105	Dielectric Voltage-Withstand Test		P
106	Enclosure Mold Stress Relief Test		P
107	Strain Relief Test		N/A
108	Drop Test		P
109	High Current Abnormal Test		P
110	High Current Inrush Test		P
111	Series Cascade Burnout Test		N/A
112	Abnormal Operation Test		N/A
113	Voltage Drop Test		P
NON-ELECTRONICALLY-OPERATED ORNAMENTS			N/A
114	General		N/A
115	Temperature Test at 200 mA (Non-Electronically-Operated)		N/A
116	Cascade Lamp Burnout Simulation Test		N/A
MANUFACTURING AND PRODUCTION TESTS			N/A
117	Production-Line Dielectric Voltage-Withstand Test		N/A
118	Lamping Test		N/A
119	Polarization Continuity Test		N/A
120	Grounding Continuity Test		N/A
RATINGS			N/A
121	Details		N/A
MARKINGS			P
122	General		P
123	Product Markings		P
124	Product/Cord Tag Markings		P
124.1	General		P
125	Cord Tag Markings		P
125.1	General		P
125.2	Products employing replaceable fuses		N/A
125.3	Products employing lamps		N/A
125.4	Products employing load fittings		N/A
125.5	Products without load fittings		P
125.6	Decorative-lighting strings		N/A
125.7	Decorative outfits		N/A
125.8	Tree stands		P
125.9	Ornaments		N/A
125.10	Products employing batteries		P
125.11	Battery supply polarity identification		P

125.12	Bubble lights		N/A
125.13	Class 2 circuits		N/A
126	Carton/Stuffer Sheet/Product/Cord Tag Markings		P
126.1	General		P
126.2	Products employing power inlets		N/A
126.3	Products employing skeleton-type lampholders		N/A
126.4	Decorative-lighting strings		N/A
126.5	Ornaments		N/A
127	Carton Markings		P
127.1	General		P
INSTRUCTION MANUAL			P
128	General		P
129	Instructions Pertaining to the Risk of Fire, Electric Shock, or Injury to Persons		P
129.1	General		P
129.2	Decorative-lighting strings, decorative outfits, and ornaments		P
130	Use and Care Instructions		P
131	User Servicing Instructions		P
SUPPLEMENT SA – SEASONAL-LIGHTING LAMPS			N/A
INTRODUCTION.			N/A
SA1	Scope		N/A
CONSTRUCTION			N/A
SA2	Screw-Base Lamps		N/A
SA2.1	General		N/A
SA2.2	Lamps intended for parallel connection		N/A
SA3	Bubble Lights		N/A
SA4	LED Lamps		N/A
SA5	Outdoor Use LED Lamps		N/A
PERFORMANCE			N/A
LAMPS INTENDED FOR SERIES CONNECTION			N/A
SA6	Maximum Lamp Wattage Test		N/A
LAMPS INTENDED FOR PARALLEL CONNECTION			N/A
SA7	Lamp Screw Base Conformity Test		N/A
SA8	Envelope-to-Base Securement Test		N/A
SA9	Lamp-Envelope Temperature Test.		N/A
BUBBLE LIGHTS			N/A
SA10	General		N/A
SA11	Identification Test		N/A
GLASS LED LAMPS			N/A
SA11A	General		N/A

PRODUCTION LINE TESTS			
SA12	General		N/A
MARKINGS			N/A
SA13	General		N/A
SUPPLEMENT SB – SEASONAL-LIGHTING LAMPHOLDERS			N/A
INTRODUCTION			N/A
SB1	Scope		N/A
SB2	Glossary		N/A
CONSTRUCTION			N/A
SB3	General		N/A
SB4	Depth of Lamp Base Cavity		N/A
SB5	Body Material		N/A
SB6	Metal Screw Shells		N/A
SB7	Skeleton-Type Lampholders		N/A
SB8	Insulation-Piercing Terminals		N/A
SB9	Outdoor-Use Lampholders		N/A
PERFORMANCE			N/A
ALL LAMPHOLDERS			N/A
SB10	General.		N/A
SB11	Dielectric Voltage-Withstand Test		N/A
SB12	Mold Stress Relief Test		N/A
SB13	Screwthread Conformity Test		N/A
SB14	Mechanical Strength of Lampholder Threads Tests.		N/A
SB14.1	Pull test		N/A
SB14.2	Torque test.		N/A
SB15	Secureness of Leads Test		N/A
SB16	Lead Pull Test		N/A
SB17	Crush Test		N/A
SB18	Temperature Tests for Seasonal Lampholders with Insulation-Piercing Terminals		N/A
SB18.1	General		N/A
SB18.2	Temperature test		N/A
SB18.3	Thermal cycling		N/A
SB18.4	Strain relief/terminal temperature		N/A
OUTDOOR-USE LAMPHOLDERS			N/A
SB19	General		N/A
SB20	Rain Test		N/A
SB21	Leakage Current Test		N/A
SB22	Leakage Current Following Humidity Conditioning		N/A
SB23	Ultraviolet (UV) Light Exposure and Water Immersion Tests		N/A

SB23.1	General		N/A
SB23.2	UV conditioning		N/A
SB23.3	Water immersion		N/A
MARKINGS			N/A
SB24	General		N/A
SUPPLEMENT SC – IN-LINE FUSEHOLDERS WITH INSULATION-PIERCING TERMINALS FOR SEASONAL PRODUCTS			N/A
INTRODUCTION			N/A
SC1	Scope		N/A
CONSTRUCTION			N/A
SC2	General		N/A
PERFORMANCE			N/A
SC3	General		N/A
SC4	Temperature Tests for Devices Employing Insulation-Piercing Terminals		N/A
SC5	Drop Test		N/A
SC6	Temperature Test		N/A
SC7	Dielectric Voltage-Withstand Test		N/A
SC8	Calibration Test		N/A
SC9	Fault Current Test		N/A
SC10	Dielectric Voltage-Withstand Test (Repeated)		N/A
SC11	Crush Test		N/A
SC12	Abnormal Pin Protrusion Test		N/A
SC13	Flexing Test.		N/A
SC14	Dielectric Voltage-Withstand Test (Repeated)		N/A
SC15	SC15 Temperature Test After Flexing		N/A
SC16	SC16 Opening Force Test		N/A
SC17	Strain Relief Test		N/A
SC18	Reliability of Conductor Connections Test		N/A
SC19	Security of Insulation Test		N/A
SC20	Fuseholder Cover Test		N/A
SC21	Outdoor-Use In-Line Fuseholders		N/A
SC22	Tests for Permanence of Cord Tag		N/A
MANUFACTURING AND PRODUCTION-LINE TESTS			N/A
SC23	Opening Force Test		N/A
SC24	Open/Close Test		N/A
SC25	Abnormal Pin Protrusion Test		N/A
MARKINGS			N/A
SC26	General.		N/A
SUPPLEMENT SD – STRING LIGHTS FOR ALL-YEAR USE			N/A
INTRODUCTION			N/A

SD1	Scope		N/A
SD2	Definitions		N/A
CONSTRUCTION			N/A
SD3	General		N/A
SD4	Overcurrent Protection		N/A
SD5	Supply Connections		N/A
SD6	General Requirements		N/A
PERFORMANCE			N/A
SD7	General		N/A
SD8	Strain Relief Test		N/A
SD9	Flexing Test		N/A
SD10	Conditioning Test Prior to Rain Test		N/A
SD11	Abnormal Operation Test		N/A
MARKINGS			N/A
SD12	General		N/A
INSTRUCTION MANUAL			N/A
SD13	General		N/A
CARTON MARKINGS			N/A
SD14	General		N/A
SUPPLEMENT SE – COMMERCIAL USE LIGHTING STRINGERS AND ASSEMBLIES			N/A
INTRODUCTION			N/A
SE1	Scope		N/A
SE2	Definitions		N/A
CONSTRUCTION			N/A
SE3	General		N/A
SE4	Supply Connections		N/A
PERFORMANCE			N/A
SE5	General		N/A
SE6	Strain Relief Temperature Test for Commercial Seasonal Lighting Assemblies		N/A
MARKINGS			N/A
SE7	General		N/A
SE8	Cord Tag Markings		N/A
SE9	Carton Markings		N/A
INSTRUCTION MANUAL			N/A
SE10	General		N/A
APPENDIX A			N/A
Standards for Components			N/A

ANNEX 1		TABLE: Critical components information					P
Object / part No.	Code	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾	
--	--	--	--	--	--	--	
Note: all components accord with standard requirements							

Photo documentation

Details of: Outlook
Remark: PNS06-751T-300LRGB



Details of: Outlook
Remark: PNS06-751T-300LRGB



Details of: Outlook
Remark: PNS07-1063T-400LRGB



Details of: Outlook
Remark: PNS07-1063T-400LRGB



Details of: Outlook
Remark: PNS09-1721T-620LRGB



Details of: Outlook
Remark: PNS09-1721T-620LRGB



END OF REPORT