



TEST SPECIFICATION

Product:	Portable Lamp		
Scope:	Electrical Portable Lamp, including strobe lights.	Protocol No.	TYCP-LU001 (US)
		Version	1.0
		Issue Date	Sep 12, 2011
		Prepared by	Tiger Yang
		Page	1 of 7

Instructions to Vendors:

Dear Valued Vendor:

Product safety is a top priority at Taymark. We, with the assistance of Intertek, a CPSC-accredited third-party testing partner or lab, have identified the various rules and regulations as well as the necessary test requirements that we need to meet in our partnership to sell products in the United States. This has been assembled into our required Test Protocol. Each product that is supplied to us must comply with this Test Protocol and any required associated test protocol(s) identified within it.

You are required by the US Law to verify the products you provide to Taymark (or any other customer marketing to children in the USA) meet the required safety standards. Likewise, Taymark is required by US Law to assure that we have documentation to confirm that you have verified that your products meet the applicable safety standards. Once you have verified that the product(s) you have supplied to us conforms to the corresponding Test Protocol(s), and the testing was conducted within the past twelve (12) months, we ask that the appropriate representative from your company provide Taymark with the proper General Certificate of Conformity ("GCC") and the corresponding documentation that you used to support the GCC, including, where applicable and required, the CPSC-accredited third-party test data. For an example of an acceptable GCC, please go to <http://www.cpsc.gov/about/cpsia/faq/elecfaq.pdf>.

Key

†: Any element on the attached form with the following symbol ("†") is a Mandatory Requirement to which the product(s) or components of product(s) you supply to Taymark must conform. You must perform the associated test(s) and provide Taymark with the test data to support the fact that the test(s) was (were) conducted and that the product(s) or components of product(s) meets the described requirements. You are responsible for conducting the mandatory testing, and you are responsible for any expenses incurred as a result of conducting the test(s) (including, without limitation, the costs and expenses associated with providing any samples, testing, reporting, and preparing the General Certificate of Conformity).

: The symbol ("") on the attached form indicates that additional charges may apply. Taymark's preferred Accredited Third-Party Testing Facility is Intertek. If you choose to use Intertek to conduct the mandatory testing, please reference Taymark and Taylor Corporation when submitting your requests for testing to Intertek as you may be able to take advantage of Taymark and Taylor Corporation's volume discount. You may contact Intertek for a price quote and any additional information they might need in order to conduct the required testing.

Additional Accredited Third-Party Testing facilities can be found at <http://www.cpsc.gov/cgi-bin/labsearch/>.

Note:

Where there is no applicable US standard, Intertek has chosen the most relevant International Standard to assess the product safety and performance. For undated references, the latest edition of the referenced document (including any amendments) applies.

TEST SPECIFICATION

Product:	Portable Lamp		
Scope:	Electrical Portable Lamp, including strobe lights.	Protocol No.	TYCP-LU001 (US)
		Version	1.0
		Issue Date	Sep 12, 2011
		Prepared by	Tiger Yang
		Page	2 of 7

Attribute	Test Method/Standard	Requirement / Limit
Supplemental Protocol(s)		
*†Battery Operated Product	TYCP-PS001	Must all also test to the Battery Operated Product protocol if applicable. See Battery Operated Product Protocol posted at http://www.taymarkinc.com
*†Batteries	TYCP -PS002	Must all also test to the Batteries protocol if applicable. See Batteries Protocol posted at http://www.taymarkinc.com
*†AC Adaptor	TYCP -PS003	Must all also test to the AC Adaptor protocol if applicable. See AC Adaptor Protocol posted at http://www.taymarkinc.com
*†CA Prop 65 (mandatory in state California)	Intertek Protocol	Consent Judgment of related court case based on California Proposition 65. See http://oehha.ca.gov/prop65.html
Note: Additional cost, sample size & TAT may be required if testing to 1 or more supplemental protocol is necessary. Please refer to the above referenced supplemental protocol(s) for additional information.		
Chemical Analysis		
1. * Lead Content in Paint and Similar Surface Coating	16 CFR 1303 (Scope Widened)	Shall not exceed 40ppm (0.004% by weight) total lead.
Document Check		
2. †One Time Use Products Fair Packaging and Labeling Act OR All Other Products Uniform Packaging and Labeling Regulations	F.P. & L. Act (16 CFR 500) OR NIST Uniform Laws and Regulations Handbook 130	Manufacturer, packer, or distributor's name & address (city, state & zip)
		Product Identification
		Net quantity of contents shall be expressed in terms of weight or mass, measure, numerical count, or combination so as to give accurate information to facilitate consumer comparison (U.S. and metric units).
3. †Country of Origin Marking	19 CFR 134.11	Shall indicate country of origin legibly, permanently, and in comparable size and close proximity to any mention of country other than country in which the article was manufactured or produced. Must be visible at point of purchase.
4. Use Labelling	Visual Check	Use/care instructions that are clear and understandable shall be provided in language appropriate to destination countries
5. Verify Label Claims (if any)	Visual Check	Must comply with all claims

TEST SPECIFICATION

Product:	Portable Lamp		
Scope:	Electrical Portable Lamp, including strobe lights.	Protocol No.	TYCP-LU001 (US)
		Version	1.0
		Issue Date	Sep 12, 2011
		Prepared by	Tiger Yang
		Page	3 of 7

Attribute	Test Method/Standard	Requirement / Limit
6. †Toxics in Packaging	Toxics in Packaging Act	Intentional introduction of any amount of lead, mercury, cadmium or hexavalent chromium in any packaging is prohibited. Incidental presence of these metals is limited to 100 ppm total concentration of lead, mercury, cadmium and hexavalent chromium in any packaging. In lieu of testing, supplier may submit a Certificate of Compliance.
7. †Plastic Bag Warning Statement (if applicable)	Based on Various State Laws: New York, Chicago, Massachusetts, and Rhode Island State and City Laws modified	Plastic bags with a thickness less than one mil (1/1000 inch) having an opening size of five inches in diameter or more must have the following warning or an equivalent warning visible from each side of the bag. If the total length and width is more than 40 inches, this warning or an equivalent warning must repeat at 20 inch intervals and be visible on each side of the bag: Warning: To avoid danger of suffocation, keep this plastic bag away from babies and children. Do not use this bag in cribs, beds, carriages or playpens. This bag is not a toy. Massachusetts, New York, and Rhode Island provide minimum type size for the warning. The following table sets forth type sizes that will satisfy all four state requirements. Total Length and Width of Bag Size of Print 60 inches or more at least 24 point 40 to 59 inches at least 18 point 25 to 39 inches at least 14 point Less than 25 inches at least 10 point *Virginia's law is intended for dry cleaning bags only and requires at least 36 point type.
8. Safety Listing Mark	NFPA 70	Shall have valid ETL, UL or CSA listing or equivalent. Verify listing by NRTL product directory with the sample's listing number and model number. * For portable lamp with UL general coverage, the following information shall be provided, - UL file, general coverage section - Declaration letter for the lamp falls into the general coverage section - Verification test to determine the lamp comply with UL 153, section 47 Temperature test-exemption requirements
9. †FCC Rules	Document Check	Products shall have valid FCC report if operating frequency > 9 kHz for AC, or operating frequency > 1.705MHz for battery operated product.

TEST SPECIFICATION

Product:	Portable Lamp		
Scope:	Electrical Portable Lamp, including strobe lights.	Protocol No.	TYCP-LU001 (US)
		Version	1.0
		Issue Date	Sep 12, 2011
		Prepared by	Tiger Yang
		Page	4 of 7

Attribute	Test Method/Standard	Requirement / Limit
10. †FCC marking and instruction	Visual	Products shall have FCC required marking and instruction if operating frequency > 9 kHz for AC, or operating frequency > 1.705MHz for battery operated product.
11. General Markings	UL153, Cls 169-182A	The following markings shall be legibly and readily visible after the product is installed: - Manufacturer's name, trademark or etc. - Electrical rating (if applicable) - Lamp replacement marking - Other markings required by standard
12. Cautionary Markings	UL153, Cls 169-182A	A cautionary or warning intended to inform the user of a potential risk of fire, electrical shock, or injury to persons shall be provided.
13. User Manual / Important Safety Instructions / Assembly Instructions	UL153, Cls 183-193A	Instructions and warnings shall be provided in the user manual identifying reasonable, foreseeable uses or misuses of the product. It shall also include instructions regarding the installation, use, safety and maintenance.
14. †DOE requirement-Torchieres	10 CFR 430	Shall have valid DOE certification report for verification. It is the vendor's responsibility to submit the certification report and compliance statement to DOE.
15. †Torchieres - Power Input	Energy Policy Act of 2005 Sec. 153(x)(1)	Shall not consume more than 190 watts power. Shall incorporate a means of limiting current to prevent lamp input power from exceeding 190W. Shall not be capable of operating with lamps that total more than 190 watts.
16. †*Indirect Lighting Verification	- DOE Interpretative Guidance Letter: Torchiere No. 1 - IESNA LM-20 section 7 IESNA LM-46 sections 5 and 6 (sphere method)	Torchieres shall meet the definition of at least 90% indirect lighting as given in DOE Interpretative Guidance Letter: Torchiere No. 1. Measurement of indirect light shall be made in an integrating sphere using a means of excluding light emitted below the reflector from the measurement of light output. Then a measurement will be made of total fixture light output without exclusion. Measured indirect light output shall be at least 90% of total.
17. †Torchieres - Marking for torchieres filled with a 190 watt current limiter	42 U.S.C. 6295 (x)	The information or the equivalent must appear on a label attached to the power supply cord and in the instructions that are fitted with a 190 watt current limiter. USER INSTRUCTIONS FOR 190 WATT LIMITED UNITS. THIS TORCHIERE LIGHTING FIXTURE MEETS THE FEDERAL ENERGY POLICY ACT OF 2005. THIS DEVICE WILL AUTOMATICALLY TURN OFF THE POWER TO THE UNIT WHEN THE BULB(S) EXCEEDS 190 WATTS. TO RETURN TO NORMAL OPERATION: 1. TURN OFF SWITCH, 2. REPLACE THE BULB(S) WITH A LOWER WATTAGE BULB(S) LESS THAN 190 WATT, 3 TURN ON THE SWITCH. THE LIGHTING FIXTURE SHOULD NOW BE OPERATING NORMALLY

TEST SPECIFICATION

Product:	Portable Lamp		
Scope:	Electrical Portable Lamp, including strobe lights.	Protocol No.	TYCP-LU001 (US)
		Version	1.0
		Issue Date	Sep 12, 2011
		Prepared by	Tiger Yang
		Page	5 of 7

Attribute	Test Method/Standard	Requirement / Limit
18. UPC code	Actual Use	Using a commercial available bar code reader to read the UPC code printed on the package/artwork. The code readout shall match with the number underneath. Record the reading displayed on the reader.
19. Parts Inventory	Visual Check	Shall meet label claims.
Electrical Safety		
20. Packing	Visual Check	No hazard when removing the packing
21. Workmanship – external	Visual Check	Shall have no sharp points/edges, other than those required for function. Shall have no components missing, malformed, and/or fractured.
22. Workmanship – internal	Visual Check	Solder connections shall be secured Components shall be reliably mounted on PCB or other proper fixing.
23. Unit Assembly	UL 153, Cls 8.5	A lighting product shall be completely wired with each electrical component mounted in place and with each splice and connection completed. During assemble, when electrical connection is located in a section of a portable luminaire that is separable for packing purposes, strain relief shall be provided to reduce the risk of stress being transmitted to the electrical connection.
24. Mechanical Assembly	Visual Check	All mechanical parts shall be securely fixed and prevented from turning.
25. Movable Parts (Swivel, joints etc)	Visual Check	Movement or rotation is limited to 360 degree and parts / internal wire is crimped, pinched or/and damaged by movement or rotation.
26. Internal Wiring	Visual Check	Wireways shall not allow wires to come in contact with sharp points, edges or moving parts.
27. Power Cord	UL 153, Cls. 31	The supply cord shall be of the type which specified in table 31.1 of UL153 and it shall not be smaller than No. 18AWG. The length of supply cord shall be at least 5 feet (1.524m) long.
28. Power Cord – Cross Section Area of Conductor (mm ²)	Standard Measure	The cross section area of conductor shall comply with Table 20.1 of UL1581 for the AWG claimed.
29. Plug	UL 153, Cls. 32.1	Plug shall be 3-wire grounding type or 2 blade polarized type.
30. Polarization	UL 153, Cls 35	Screw shell of lampholder shall be connected to the grounded conductor of the power supply. Fuse and switches shall be connected to the un-grounded conductor of the power supply.

TEST SPECIFICATION

Product:	Portable Lamp		
Scope:	Electrical Portable Lamp, including strobe lights.	Protocol No.	TYCP-LU001 (US)
		Version	1.0
		Issue Date	Sep 12, 2011
		Prepared by	Tiger Yang
		Page	6 of 7

Attribute	Test Method/Standard	Requirement / Limit
31. Strain Relief	UL 153, Cls. 133	<p>The strain-relief means shall be capable of withstanding for 1 minute, a pull of 35 lbf applied on the cord. The following shall not occur,</p> <ul style="list-style-type: none"> - the insulation or covering on the flexible cord or wiring is cut or torn - the bushing slides through the hole in the chassis or enclosure - a cemented-on bushing slides on the cord - for a cord or wiring that is not severed at the terminals, stain is placed on internal conductors - for a cord or wiring that is severed at the terminals, there is movement of cord more than 1/16" (1.6 mm) at the points where connections are made or where the conducts are permanently assembled to the terminals.
32. Stability Test	UL 153, Cls. 132	<p>The product, complete with glassware or shade provided is placed on a plane inclined at an angle of 8 degrees with the horizontal. The product shall not tip over.</p> <p>Lamps having toy-like appearance shall not overturn when tested with a 15 degrees inclined plane.</p>
33. Accessibility of Live Parts	UL 153, Cls 23	<p>The live parts shall not be accessible to unintentional contact by persons during normal use, including relamping, replacement of electric device or other user maintenance services.</p> <p>A live part is determined to be inaccessible when a probe as illustrated in standard is unable to be manipulated such that it touches any part. All parts that are removable without the use of tools shall be removed when determining accessibility.</p>
34. Dielectric Strength Test	UL 153, Cls. 137	<p>The insulation and spacings shall withstand the dielectric voltage withstand test without breakdown for a period of 1 min when 1200VAC is applied between:</p> <ul style="list-style-type: none"> a) Live parts and accessible dead metal parts b) Live parts and accessible low-voltage metal parts, including terminals.
35. Continuity of grounding connection	UL 153, Cls. 136	<p>All exposed dead metal parts that are exposed to contact during any servicing operation, including maintenance and repair, and that can become energized shall be electrically connected to the grounding terminal and with earth resistance not more than 0.1 Ohm.</p>
Performance Test		
36. Functional Check	Actual Use	<p>All the major features shall be matched with the installation and use instructions and claims made on the packaging, with no inaccurate or misleading statements about the product, or any other user-friendliness problems.</p>

TEST SPECIFICATION

Product:	Portable Lamp		
Scope:	Electrical Portable Lamp, including strobe lights.	Protocol No.	TYCP-LU001 (US)
		Version	1.0
		Issue Date	Sep 12, 2011
		Prepared by	Tiger Yang
		Page	7 of 7

Attribute	Test Method/Standard	Requirement / Limit
37. Ease of Installation	Actual use	Follow the instructions for assembly and disassembly the product; and comment on the method of the installation. Parts shall not be easy to break during normal use.
38. Ease of Cleaning	Actual use	Follow the instructions to clean up the unit. Comment on the method of cleaning.
39. Range of operation	In-house method	The unit should operate within the voltage range of 106-127 volts.
40. Continuous Operation Test	In-house method	<p>Set the unit to normal operation; install lamps with maximum wattage; continuously operate for 7 hours. Shall not indicate safety issue, fire risk, or any other abnormality.</p> <p>Polymeric material used as decorative parts shall not melt or deform in such a way as to interfere with normal operation of the product.</p> <p>After the test, check for excessive temperatures on supporting surface and all accessible surfaces. In case of doubt, measure the temperature and shall not exceed the following, External surfaces (other than lamps or lenses): 90degC/194degF Operating knobs, handles for momentary contact: 50degC/122degF (metallic); 70degC/158degF (glass); 85/185degF degC (plastic) Handles or surfaces intended to be grasped: 50degC/122degF (metallic); 60degC/140degF (non-metallic) Exterior of wall or ceiling mounted lamps: 90degC/194degF Surfaces adjacent to the portable lamp: 90degC/194degF</p>
41. Durability of Switches	In-house method	Switches shall continue to function correctly after 200 cycles of operations.

Remark: Additional tests may be incurred subject to the final samples reviewed by Intertek.