LOG OF MEETING
DIRECTORATE FOR ENGINEERING SCIENCES

SUBJECT: Requirements for Torchiere Style Portable Floor Lamps

DATE OF MEETING: September 19, 1997

PLACE OF MEETING: Underwriters Laboratories Inc. (UL), Research Triangle Park, North Carolina

LOG ENTRY SOURCE: Anna Luo, ESEE A Luo

CPSC ATTENDEES:

William H. King, Director, Division of Electrical Engineering
Anna L. Luo, Electrical Engineer

NON-CPSC ATTENDEES:

Thomas L. Wollan, Managing Engineer - Engineering Services, UL
Kenneth F. Kempel, Associate Managing Engineer - Engineering Services, UL
David M. Belt, Staff Engineer - Engineering Services, UL
Dixie Stevens, Standards Representative - Standards Department, UL

SUMMARY OF MEETING:

Mr. King (CPSC) presented the following CPSC staff positions regarding necessary minimum safety requirements for torchiere style portable floor lamps for general use in residences and elsewhere by consumers. When unusually high operating temperatures are generated as a result of using relatively high wattage light bulbs (tubular halogens and exposed-bulb, up-light incandescents), the requirements listed below are appropriate.

1. Abnormal Operation Test: The proposed test fabric indicator should be 20 layers of cheesecloth arranged in the wrapped configuration developed by UL. The test pass criteria should be no ignition of the fabric and no burn hole through any of the layers of the cheesecloth as a result of exposure to the heat generated by the light source. During the test, thermal limiting devices should be shunted out of the circuit.

2. Accessibility Probes: A 1-1/2 inch (38 mm) spherical probe should not be able to penetrate a guard. A 35 mm wide, 10 mm thick flat plate probe should not be able to contact the bulb glass containment barrier when vertically penetrating a guard in any orientation.

3. Minimum Specifications: For tubular halogen bulbs, 300 watts maximum. For wire guards used with a tubular halogen bulb rated 300 watts, the minimum distances from the glass bulb shield to the guard should be 3 inches (75 mm) at the center, tapering down to 2-3/8 inches (60 mm) at the ends of the glass bulb shield.

CPSA 6 (b)(1) Cleared
✓ No Mfrs/PrvtLblrs or Products Identified
10/9/97

4. Impact Test: The lamp guard required to pass the Abnormal Operation Test should not be compromised (dislodge, break apart) when the lamp is caused to fall against a floor surface.

5. Stability: Increase the inclined plane from 8 to 12 degrees. For articulated arm torchieres, power to the bulb should cease when the lamp is tipped beyond the point of righting itself, in any direction.

CPSC staff noted that item numbers 1 through 3 above are intended to result in a UL standard that achieves a level of safety equivalent to existing 300 halogen torchiere lamps that use the retrofit kit guard developed by industry and implemented through the industry-CPSC recall program.

UL noted they planned to include the "impact" or "tip-over" test concept in item 4 above as a proposed revision to UL 153. UL will also be working on the development of items 1,2,3 & 5.