Photoluminescent Lighting Council

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# Test Method for High Luminance Egress Path Marking Systems

## Background

Photoluminescent path markings which are part of a High Luminance Egress Path Marking System must continue to provide high levels of luminance for a period of time sufficient to ensure safe evacuation of all persons from the building or facility. This test method will determine if the path marker has sufficient luminance for this purpose.

## Aim

To determine if a path marker will provide sufficient luminance to be included in a High Luminance Egress Path Marking System.

## Method

All step edge products, handrail markings and perimeter demarcation products shall be independently tested in accordance with UL 1994 Standard for Luminous Egress Path Marking Systems.

Testing includes the following:
1. Products shall be subjected to UV light exposure test conditions of the UL 746C Standard for Polymeric Materials - Use in Electrical Equipment Evaluations if the path markers are intended for use in outdoor wet conditions;
2. Products shall be subjected to the static friction test of the UL 410 Standard for Slip Resistance of Floor Materials if the path markers are intended for use on stair nosings;
3. Products shall be subjected to conditioning representative of manufacturers cleaning procedures if the path markers are intended for use on a walking surface;
4. Products shall be subjected to the sample conditioning of the visibility test, and the visibility test is replaced by luminance readings at 60, 90, 120 and 180 minutes after charging ceases.

All testing shall be carried out at a third party test laboratory, with internationally recognised credentials.

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**Acceptance Criteria (for High Luminance)**

After charging ceases, minimum luminance readings must be as follows:
15 mcd/m² at 60 minutes;
10 mcd/m² at 90 minutes;
8 mcd/m² at 120 minutes; and
5 mcd/m² at 180 minutes.

**Conclusion**

All path markings that meet the acceptance criteria are deemed to have sufficient luminance to be included in a High Luminance Egress Path Marking System.