

Subject 2108

April 14, 2017

SUMMARY OF TOPICS

The following changes in requirements to the Standard for Low Voltage Lighting Systems, UL 2108, are being proposed:

- 1. Address Equipment for Use in Environmental Air Spaces***
- 2. Revise Requirements for Enclosure Openings***
- 3. Addition of Electrical Ratings for Power Units and Luminaires***

STP BALLOTS AND ALL COMMENTS DUE: MAY 15, 2017

UL's goal is to have no interest category comprise more than one-third of the STP membership balance. To improve the current balance for STP 2108, UL is looking for participants in the AHJ, Commercial/Industrial User, Government, Supply Chain, and Testing and Standards interest categories. Definitions for these interest categories are available on the Standards STP Internet site:

<http://ulstandards.ul.com/develop-standards/participation/interest-categories/>

If you are interested in applying for STP 2108 membership or are aware of potential candidates for this STP, please contact the STP Project Manager, Ritu.Madan@ul.com.

For your convenience in review, proposed additions to existing requirements are shown underlined and proposed deletions are shown ~~lined-out~~.

1. Address Equipment for Use in Environmental Air Spaces

RATIONALE

Proposal submitted by: Mike Shulman, UL LLC

Not all equipment located in an air-handling space above a suspended ceiling will penetrate that ceiling and potentially be covered with insulation. Equipment that penetrates the ceiling (or a wall) is considered "recessed". But some low voltage lighting equipment, such as controls or accessories, may be located fully above the ceiling and within the air-handling space.

Shifting the requirements associated with use in an environmental air handling space into a separate section allows equipment to be rated for use in such spaces but not be considered a "recessed" piece of equipment. This will avoid triggering an investigation for compliance with the recessed temperature test program where it is not necessary. The proposal does not change the basic requirements for either type of application nor does it inhibit equipment from qualifying for both ratings, where desired.

The proposal includes several other changes for clarification purposes:

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- 1) Revises the definition of “recessed equipment” to be descriptive rather than circular, to clarify that all recessed equipment is identified as one of four possible types, and to streamline the description of those four types of recessed equipment;
- 2) Adds the word “plenum” to indicate its equivalency, in this context, to an environmental air-handling space;
- 3) Adds the suffix “.22(C)” to the NEC 300 reference in the footnote to 11A.1, aligning with the existing reference in 48.1.9. This section of the NEC is rather lengthy and complex so the more specific reference will be helpful to users of the standard;
- 4) Shifts the environmental air space marking to a separate clause (11A.2) to ensure that equipment whose installation instructions indicate suitability for an air handling space are subject to the appropriate testing, even if the product is not so marked;
- 5) Explicitly allow equipment with metal enclosures, which are permitted by NEC 300.22(C)(3) to be installed in air handling spaces without any additional testing or marking, to be marked as suitable for this application.
- 6) Adjust clauses 48.1.9, 67.1.11, 70.2, and Table 51.1 to align with these other changes.

PROPOSAL

3.18 RECESSED UNIT EQUIPMENT – ~~A luminaire or power unit that is designed to be either wholly or partially recessed in a~~ Equipment intended to be installed through (penetrating) the mounting surface, and identified as one of the following:-

Inherently Protected - Suitable for installation where in direct contact with thermal insulation or combustible materials, without reliance on a thermal protector to limit operating temperatures.

Type IC, Thermally Protected Type IC– ~~A recessed luminaire or power unit that is designed and identified~~ Suitable for installation where in a cavity filled with thermal insulation. The unit may be in direct contact with thermal insulation or combustible materials and the insulation.

Type Non-IC, Thermally Protected – ~~A recessed luminaire or power unit that is designed~~ Suitable for installation in a cavity with minimum dimensions and spacings to thermal insulation and or combustible materials that comply in accordance with the installation code. It is not intended to be in contact with or covered with combustible materials and insulation.

Type Non-IC, Concrete Only – ~~A luminaire or power unit that is not provided with thermal protection because it is investigated and identified~~ Suitable for installation only in poured concrete.

~~Inherently Protected – A luminaire or power unit that is investigated and identified for installation in a cavity where the unit is in direct contact with thermal insulation or combustible materials and the construction is such that, even without a thermal protector, a luminaire is unable to be overlamped or mislamped, or a power unit overloaded to the extent that operating temperatures are exceeded in accordance with the prescribed limits in Table 34.1.~~