STANDARDS UPDATE NOTICE (SUN)
ISSUED: December 21, 2018

STANDARD INFORMATION

Standard Number: UL 924
Standard Name: Emergency Lighting and Power Equipment
Standard Edition and Issue Date: 10th Edition May 19, 2016
Date of Revision: May 1, 2018
Date of Previous Revision of Standard: November 8, 2017

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **September 30, 2019**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: A review of all Listing Reports is necessary to determine which products comply with new/revised requirements and which products will require re-evaluation. **NOTE:** Effective immediately, this revised standard will be exclusively used for evaluation of new products unless the Applicant requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revised requirements.

Overview of Changes:

- Expanded requirements for emergency lighting controls
- Expanded options for derangement signals

Specific details of new/revised requirements are found in table below.

If the applicable requirements noted in the table are not described in your report(s), these requirements will need to be confirmed as met and added to your report(s) such as markings, instructions, test results, etc. (as required).

Client Action Required:

Information – To assist our Engineer with review of your Listing Reports, please submit technical information in response to the new/revised paragraphs noted in the attached or explain why these new/revised requirements do not apply to your product (s).

Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.

STANDARD INFORMATION

CLAUSE	VERDICT	COMMENT
		Additions to existing requirements are underlined and deletions are shown lined out below.
28	Info	**Derangement Signals**
28.2		Derangement signal activation shall occur under each of the following conditions, if applicable to the equipment under test: a) Disconnection of the battery power source; Exception: Disconnection of the battery need not be considered for equipment with batteries not intended for replacement, maintenance or service, such as an emergency battery pack or equipment marked in accordance with 73.1.14. b) The battery is actively supplying a remote (but not concurrently a local) load; c) The battery charger is not receiving its intended charging voltage or has experienced an internal failure that inhibits its ability to provide the intended charging current to the battery; or d) For self-testing / self-diagnostic equipment, detection of a non-functional feature during a self-testing/self-diagnostic routine, in accordance with 30.1. e) A fault condition in an electronic circuit relied upon for compliance with 23.3.
29	Info	**Test Switch**
29.1		~~Emergency lighting and power equipment provided with an automatic load control relay switching device shall be provided with a manually operable test switch, or provisions for the connection of an external test switch, to simulate the conditions under which the load control relay switching device is intended to operate (such as loss of the normal supply). The test switch shall be evaluated per 47.6.~~ Equipment provided with an ELCF shall have means for periodic testing, such as an integral or remote (wired or wireless) switch , to simulate the conditions under which the ELCF is intended to operate (such as loss of the normal supply). The test switch shall be evaluated per Emergency Lighting Control Functionality (ELCF), Section 47.
30	Info	**Self-Testing/Self-Diagnostic Equipment**

CLAUSE	VERDICT	COMMENT
		Equipment that contains self-testing/self-diagnostic capability shall automatically perform a minimum 30 second test at least once every 30 days to verify the following:
30.1		a) ~~Automatic load transfer system functionality~~ ELCF operation; The equipment shall be tested in accordance with 47.7 and 47.8. If the equipment relies on electronic circuits (for timing or test/diagnostic capability), the circuit shall comply with 23.3.
47	Info	~~Normal Operation~~ Emergency Lighting Control Functionality (ELCF) Test
47.1		Equipment ~~intended to automatically respond upon loss of normal power or upon activation of an emergency signal~~ with ELCF or with self-testing/self-diagnostic circuitry intended to assess equipment status, shall operate as intended in accordance with this Section.
47.2		~~An automatic load control relay, either as a separate device or as an electronic function integral to the equipment, shall be connected as intended to its supply source(s) and controlled load(s). Signal inputs indicating loss of normal power, and any other emergency signal for which the equipment is intended to respond, shall be individually transmitted to the relay. The relay shall transmit normal or emergency power levels, whichever is appropriate for the condition represented by the signal.~~ An ELCD, whether a separate device or as an electronic function integral to the equipment, shall be connected as intended to its supply source(s) and controlled load(s). Signal inputs for emergency lighting functionality per (a) – (e) below shall be individually transmitted to the ELCD. The tests can be performed in any sequence and shall be performed in every sequence that represents a unique combination of conditions. Consideration shall be given to different power and signal inputs, the different sequence of equipment activation, and all permutations that may render different performance. Multiple functions can be assessed by a single test. a) Sensing – Each current carrying (hot and neutral) supply source line being monitored shall be individually interrupted. The ELCD shall detect each changed condition and emit an appropriate signal. b) Interpreting - An input signal indicating normal power status shall be provided, and then switched to indicate loss of normal power. The output shall be assessed in both conditions to validate accuracy. c) Control – The ELCD shall be provided with an input signal indicating the presence of normal power. A controlled load shall be turned “off”. The input signal shall then be changed to indicate that normal power has been disrupted. The controlled load shall be monitored to validate that the ELCD has overridden the “off” position and directed the controlled load to shift to an appropriate state of activation[1]. For an ELCD identified as suitable for use with dimmable or otherwise adjustable

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		luminaires, this test shall be repeated with a controlled load initially set (under normal power conditions) over a range of control inputs representative of any illumination inhibitory states. [1]Activation when normal power is lost can be full output illumination, or some other setting less than full illumination where the ELCD instructions identify how to set this level for compliance with the applicable Codes (e.g., NFPA 101). d) Distributing – The ELCD shall be provided with an input signal indicating the presence of normal power. The distribution of power and control signals from the ELCD shall be validated as appropriate for normal power conditions. The input signal shall then be changed to indicate that normal power has been disrupted. The distribution of power and control signals shall be validated as appropriate for emergency power conditions. e) Simulating – The 'test' function of the ELCD shall be actuated[2]. The ELCD output shall be monitored to validate that emergency power is transmitted to the controlled load(s). [2]Actuation shall be manual, whether by a mechanical switch or radio (or similar) signal. For self-test equipment, see 30.1.
	Info	**INSTRUCTION MANUAL**
74	Info	**General**
74.3		***New clause added;*** The instruction manual for equipment with ELCF capability shall describe the operational mode(s) of the ELCF and describe the appropriate testing and diagnostic procedures. Where ELCF capability is dependent on signals or power received from or transmitted to other equipment, the instructions shall include identification of the other equipment, any constraints on the installation of or means of interaction with that equipment, and a description of procedures to verify that the intended interoperability is established.
		CUSTOMERS PLEASE NOTE: This Table and column "Verdict" can be used in determining how your current or future production is or will be in compliance with new/revised requirements.