

## STANDARD INFORMATION

**Standard Number:** UL 1472 / CSA C22.2 No. 184.1  
**Standard Name:** Solid-State Dimming Controls  
**Standard Edition and Issue Date:** 2<sup>nd</sup> Edition Dated September 25, 2015  
**Date of Revision:** November 10, 2017  
**Date of Previous Revision of Standard:** September 25, 2015

## EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

**Effective Date:** **June 13, 2019**

## IMPACT, OVERVIEW, AND ACTION REQUIRED

**Impact Statement:** A review of all Listing Reports is necessary to determine which products comply with new/revise 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requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revise requirements.

### Overview of Changes:

- Addition of 347 VAC Synthetic Load Characteristics to Represent Electronic Ballasts and Self- Ballasted Lamps
- Addition of Requirements for CFL and LED – Recovery Time

Specific details of new/revise 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/revise paragraphs noted in the attached or explain why these new/revise 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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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
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*Additions to existing requirements are underlined and deletions are shown lined out below.*

5	Info	<b>Tests</b>
5.2	Info	<b>Test loads</b>
5.2.3	Info	<b>Electronic ballasts and self-ballasted lamps</b>
5.2.3.2		Based on the current and voltage rating of the dimmer, a synthetic test load circuit, shown in Figure 6, shall provide the steady state and inrush current characteristics meeting or exceeding those characteristics shown in Tables 13 <u>and 14</u> .
5.2.3.5		The specific electronic ballast or self-ballasted lamp shall be used as the load when the dimmer is marked in accordance with Clause 7.1.6. The overload, endurance, and temperature test sequence shall be completed with the specific load. <u>During Overload and Endurance testing, the ballast or self-ballasted lamp loads shall fully discharge between cycles so maximum inrush current is available for each cycle.</u>

*Only modified parts of the table are shown*

**Overload test - peak current requirements**

Table 13

<b>Dimmer Switches Rated 347 VAC</b>				
<u>Steady state current (A), I<sub>c</sub></u>	<u>Overload Test Current 150% of Steady State Current (A) @ 347 V AC</u>	<u>Peak current (A), 347 VAC</u>	<u>Pulse Width 347 VAC (mS)</u>	<u>I<sub>2t</sub> (A<sup>2</sup> sec) 347 VAC See Note 1</u>
<u>0.5</u>	<u>0.75</u>	<u>246</u>	<u>0.41</u>	<u>143</u>
<u>1</u>	<u>1.5</u>	<u>317</u>	<u>0.60</u>	<u>237</u>
<u>2</u>	<u>3</u>	<u>396</u>	<u>0.86</u>	<u>369</u>
<u>3</u>	<u>4.5</u>	<u>430</u>	<u>1.08</u>	<u>434</u>
<u>5</u>	<u>7.5</u>	<u>492</u>	<u>1.42</u>	<u>546</u>
<u>8</u>	<u>12</u>	<u>529</u>	<u>1.86</u>	<u>658</u>
<u>10</u>	<u>15</u>	<u>550</u>	<u>2.05</u>	<u>711</u>
<u>12</u>	<u>18</u>	<u>572</u>	<u>2.28</u>	<u>768</u>
<u>15</u>	<u>22.5</u>	<u>595</u>	<u>2.57</u>	<u>831</u>
<u>16</u>	<u>24</u>	<u>601</u>	<u>2.66</u>	<u>849</u>

Note 1 – The values used to calculate I<sub>2t</sub> are the peak current shown in the table above and pulse duration of 2.35 mS (t).



Only modified parts of the table are shown

**Endurance test - peak current requirements**

Table 14

<b>Dimmer Switches Rated 347 VAC</b>			
<b><u>Steady state current (A), Is</u></b>	<b><u>Peak current (A), 347 VAC</u></b>	<b><u>Pulse Width 347 VAC (mS)</u></b>	<b><u>I2t (A2 sec) 347 VAC See Note 1</u></b>
<u>0.5</u>	<u>198</u>	<u>0.34</u>	<u>92</u>
<u>1</u>	<u>270</u>	<u>0.47</u>	<u>173</u>
<u>2</u>	<u>354</u>	<u>0.70</u>	<u>294</u>
<u>3</u>	<u>296</u>	<u>0.86</u>	<u>269</u>
<u>5</u>	<u>450</u>	<u>1.15</u>	<u>476</u>
<u>8</u>	<u>492</u>	<u>1.50</u>	<u>569</u>
<u>10</u>	<u>508</u>	<u>1.67</u>	<u>606</u>
<u>12</u>	<u>529</u>	<u>1.66</u>	<u>658</u>
<u>15</u>	<u>550</u>	<u>2.95</u>	<u>711</u>
<u>16</u>	<u>552</u>	<u>2.10</u>	<u>716</u>
<u>Note 1 – The values used to calculate I2t are the peak current shown in the table above and pulse duration of 2.35 mS (t).</u>			

**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.**