

**DOCKETED**

<b>Docket Number:</b>	18-AAER-08
<b>Project Title:</b>	Federally Exempted Linear Fluorescent Lamps
<b>TN #:</b>	232769
<b>Document Title:</b>	NEMA Comments on CEC Rulemaking for Federally Exempted Linear Fluorescent Lamps
<b>Description:</b>	N/A
<b>Filer:</b>	System
<b>Organization:</b>	Alex Boesenberg
<b>Submitter Role:</b>	Public
<b>Submission Date:</b>	4/16/2020 11:27:26 PM
<b>Docketed Date:</b>	4/17/2020

*Comment Received From: Alex Boesenberg  
Submitted On: 4/16/2020  
Docket Number: 18-AAER-08*

**NEMA Comments on CEC Rulemaking for Federally Exempted  
Linear Fluorescent Lamps**

*Additional submitted attachment is included below.*



National Electrical Manufacturers Association

PHILIP A. SQUAIR

Vice President, Government Relations

April 17, 2020

Online via:

<https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=18-AAER-08>

Commissioner Andrew McAllister  
California Energy Commission  
Docket No. 18-AAER-08  
1516 Ninth Street  
Sacramento, CA 95814-5512

**NEMA Comments on CEC Rulemaking for Federally Exempted Linear Fluorescent Lamps**

Dear Commissioner McAllister:

As the leading trade association representing manufacturers of linear fluorescent lamps, the National Electrical Manufacturers Association (NEMA) submits this follow up to our comments of August 26, 2019<sup>1</sup>. These comments are submitted on behalf of NEMA Light Source Section and NEMA Ballast and Driver Section Member companies.

NEMA represents more than 325 electrical equipment and medical imaging manufacturers that make safe, reliable, and efficient products and systems across 56 product Sections. Our combined industries account for 370,000 American jobs in more than 6,100 facilities covering every state. Our industry produces \$124 billion electrical equipment and medical imaging shipments per year with \$42 billion exported.

We urge your careful consideration of these comments. Our Members look forward to an outcome that meets their expectations. If you have any questions on these comments, please contact Alex Boesenberg of NEMA at [alex.boesenberg@nema.org](mailto:alex.boesenberg@nema.org).

Sincerely,

A handwritten signature in black ink that reads "Philip A. Squair". The signature is written in a cursive, flowing style.

Phil Squair  
Vice President, Government Affairs  
National Electrical Manufacturers Association

---

<sup>1</sup> <https://efiling.energy.ca.gov/GetDocument.aspx?tn=229532&DocumentContentId=60943>

## **NEMA Comments on CEC Rulemaking for Federally Exempted Linear Fluorescent Lamps**

ISSUE: On page 25 of the draft staff report,<sup>2</sup> the Test Procedure section states:

*“For less than 4-foot type-A and type-B linear LED lamps, staff proposes to use the federal test procedure for integrated LED lamps.”*

1. Type A lamps are a non-integrated Product and should be tested using the Federal Test Procedure for non-integrated LED lamps as found in 10 CFR 430 Appendix DD to Subpart B.

Title 20, §1602 (n) offers the following definitions for integrated and non-integrated LED lamps:

*“LED lamp, integrated” means an integrated assembly comprised of LED packages (components) or LED arrays (modules), LED driver, ANSI standard base and other optical, thermal, mechanical and electrical components. The device is intended to connect directly to the branch circuit through a corresponding ANSI standard lamp holder (socket)*

*“LED lamp, nonintegrated” means an assembly comprised of an LED array (module) or LED packages (components) and an ANSI standards base. The device is intended to connect to the LED driver of an LED luminaire through an ANSI standard lampholder (socket). The device cannot be connected directly to the branch circuit.*

From page 12 of the draft staff report:

### ***“UL Type-B Linear LED Lamps***

*UL type-B TLED lamps also have internal LED drivers. However, unlike type-A TLED lamps, type-B TLED lamps connect directly to the alternating current (AC) mains power.”*

, An American National Standard, ANSI C78.53<sup>3</sup>, has recently been approved describing test methods for non-integrated (Type A) LED Lamps. The Standard clearly states that “Type A lamps are direct replacement lamps intended to be used with fluorescent ballasts without the need to modify the luminaire or to examine the existing ballast.”

In reviewing the above references, since type A lamps cannot directly connect to the AC mains power this means they are a non-integrated LED lamp based on that definition in Title 20, i.e., they cannot connect directly to the branch circuit.

2. Additionally, we refer CEC to ANSI C78.53 Clause 5.6.1 which specifies that the manufacturer “shall identify the compatible ballast type/models in accordance with this document”. Currently, the Federal Test Procedure lacks this important provision. Some

---

<sup>2</sup> Pasha, Soheila. 2019. *Analysis of Proposed Efficiency Standards for Linear Fluorescent Lamps Exempt from Federal Regulation*. California Energy Commission. Publication Number: CEC-400-2019-009-SD.

<sup>3</sup> <https://www.nema.org/Standards/Pages/American-National-Standard-for-Electric-Lamps%E2%80%9494-Performance-Specifications-for-Direct-Replacement-LED-Light-Emitting-Diode-L.aspx>

NEMA Members intend to apply for a waiver modification to the Federal Test Procedures to rectify this oversight.

3. For these reasons, CEC should change the test procedure for the proposed regulations to reflect that Type A LED lamps should follow the Federal test procedure for non-integrated lamps in 10 CFR 430 Appendix DD to Subpart B, with the added notation that a reference ballast or ballasts should also be identified.