

A Change is Coming:

Testing your knowledge of the New Lighting Specifications

October 12, 2015 3:15 pm - 4:15 pm EDT

Daniel Rogers, LC, ICF International







Session Agenda

- Specification Update
- Interactive Quiz
- Discussion





Luminaires Specification

- Luminaires V2.0 Specification was released on May 29, 2015.
 - Any luminaire manufactured as of <u>June 1, 2016</u> must be certified to V2.0 to bear the ENERGY STAR mark.
 - All certifications to Luminaires V1.x expire on <u>June 1, 2016</u>
 - There IS NO GRANDFATHERING
- After <u>December 1, 2015</u>, no new products can be certified to Luminaires V1.2.
- Models already certified to V1.0 V1.2 will maintain their certification status until <u>June 1, 2016</u>.
- Point revision (V2.1) upcoming.





Lamps Specification

EPA anticipates releasing Lamps V2.0 Specification by the end of 2015.

Event	Date
Draft 1 Released	February 13, 2015
Draft 1 Webinar	March 3, 2015
Deadline for Draft 1 Written Comments	March 13, 2015
Draft 2 Released	April 10, 2015
Draft 2 In-Person Meeting and Webinar	April 20, 2015
Deadline for Draft 2 Written Comments	May 7, 2015
Draft 3 Released	August 6, 2015
Draft 3 Webinar	August 21, 2015
Deadline for Draft 3 Written Comments	September 4, 2015
Draft 4	Late October 2015





The ENERGY STAR Match Game!

- Two teams
- Twenty questions
- Fill in the blanks
- Team with the higher score wins!





For those who want to play along...

Go to

PollEv.com/ESPPM2015

And play along from your seat.





20 Questions

- 1st Set of 5 Questions 10 pts.
- 2nd Set of 5 Questions 20 pts.
- 3rd Set of 5 Questions 30 pts.
- 4th Set of 5 Questions 40 pts.





Question 1 (10 points)

What is the first date a product can be certified under Luminaires V2.0?

- a. May 29, 2015
- b. June 1, 2016
- c. December 1, 2015
- d. June 1, 2015





Question 1 (10 points)

What is the first date a product can be certified under Luminaires V2.0?

- a. May 29, 2015
- b. June 1, 2016
- c. December 1, 2015
- d. June 1, 2015





Question 2 (10 points)

Which of the following is not a packaging requirement for Luminaires V2.0?

- a. Demonstrate the light distribution of the luminaire
- b. Indicate dimming range (as applicable)
- c. Refer to 3500K as "Gelder White"
- d. Include a label certifying "airtight" (as applicable).





Question 2 (10 points)

Which of the following is not a packaging requirement for Luminaires V2.0?

- a. Demonstrate the light distribution of the luminaire
- b. Indicate dimming range (as applicable)
- c. Refer to 3500K as "Gelder White"
- d. Include a label certifying "airtight" (as applicable).





Question 3 (10 points)

Does a product that only changes color temperature when dimmed fit the V2.0 definition of a Color Tunable Luminaire?

- a. Yes
- b. No





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- a. Yes
- b. <u>No</u>





Question 4 (10 points)

Which of the following is not an ENERGY STAR color requirement?

- a. No lamp units tested shall have CRI <75
- b. Class A color
- c. Report R₉
- d. CRI shall be ≥ 80





Question 4 (10 points)

Which of the following is not an ENERGY STAR color requirement?

- a. No lamp units tested shall have CRI <75
- b. Class A color
- c. Report R₉
- d. CRI shall be ≥ 80





Question 5 (10 points)

What is the last date a product can be certified under Luminaires V1.2?

- a. May 29, 2015
- b. June 1, 2016
- c. December 1, 2015
- d. June 1, 2015





Question 5 (10 points)

What is the last date a product can be certified under Luminaires V1.2?

- a. May 29, 2015
- b. June 1, 2016
- c. <u>December 1, 2015</u>
- d. June 1, 2015





Question 6 (20 points)

Which of the following ANSI standard base type was NOT proposed in Draft 3 of the Lamps V2.0 specification?

- a. G4
- b. G9
- c. GX5.3
- d. Mogul





Question 6 (20 points)

Which of the following ANSI standard base type was NOT proposed in Draft 3 of the Lamps V2.0 specification?

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- b. G9
- c. GX5.3
- d. Mogul





Question 7 (20 points)

Which of the following ANSI standard lamp shape was proposed in Draft 3 of the Lamps V2.0 specification?

- a. MRX
- b. PAR16
- c. PS
- d. ST





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- b. PAR16
- c. PS
- d. ST





Question 8 (20 points)

Which of the following products are excluded from ENERGY STAR?

- a. Pin-based linear and compact fluorescent
- b. LED lamps intended to replace linear fluorescent, pin-based CFL or HID lamps.
- c. Lamps incorporating power-consuming features not related to control of illumination.
- d. All of the above





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Question 9 (20 points)

Which is NOT a recommended or required use of the ENERGY STAR mark on certified luminaires?

- a. ENERGY STAR certification mark on product packaging
- b. ENERGY STAR certification mark on cut sheet
- c. ENERGY STAR hangtag on in store display models
- d. ENERGY STAR mark etched on product





Question 9 (20 points)

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Question 10 (20 points)

What is the minimum test duration an LED lamp needs to undergo to carry the ENERGY STAR mark?

- a. 1,000 hours
- b. 3,000 hours
- c. 6,000 hours
- d. 25,000 hours





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Question 11 (30 points)

Which products are new to the scope of the ENERGY STAR Luminaires Specification V2.0?

- a. Linear luminaire forms with integrated drivers
- b. Products covered under Zhaga book XII
- Retrofit kits designed to replace externally ballasted compact fluorescent lamp (CFL) wall sconce.
- d. Integrally ballasted G24q based lamps





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Question 12 (30 points)

The Standby Power requirement in Luminaires V2.0 for power supplies connected to multiple luminaires is Luminaires V1.2.

- a. More restrictive than
- b. The same as
- c. Less restrictive than





Question 12 (30 points)

The Standby Power requirement in Luminaires V2.0 for power supplies connected to multiple luminaires is Luminaires V1.2.

- a. More restrictive than
- b. The same as
- c. Less restrictive than





Question 13 (30 points)

Which test is not required of all products for re-certification under Luminaires V2.0?

- a. Standby Power
- b. Color maintenance
- c. Start Time
- d. Ask my Certification Body





Question 13 (30 points)

Which test is not required of all products for re-certification under Luminaires V2.0?

- a. Standby Power
- b. Color maintenance
- c. Start Time
- d. Ask my Certification Body





Question 14 (30 points)

Which of the following is a packaging requirement for Lamps V1.1?

- a. Include model number or retail SKU.
- b. Display lamp's dimming capability on front panel.
- c. Indicate the performance ratings are based on limited orientation as applicable (e.g., base up).
- d. All of the above





Question 14 (30 points)

Which of the following is a packaging requirement for Lamps V1.1?

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- b. Display lamp's dimming capability on front panel.
- c. Indicate the performance ratings are based on limited orientation as applicable (e.g., base up).
- d. All of the above





Question 15 (30 points)

When did EPA first propose a 10,000 life requirement for integrated LED lamps?

- a. Never
- b. Lamps V1.0 Draft 1
- c. Lamps V1.1 Draft 2
- d. Lamps V2.0 Draft 1





Question 15 (30 points)

When did EPA first propose a 10,000 life requirement for integrated LED lamps?

- a. Never
- b. Lamps V1.0 Draft 1
- c. Lamps V1.1 Draft 2
- d. Lamps V2.0 Draft 1





Question 16 (40 points)

Under Luminaires V2.0, what testing is not needed for a luminaire that ships with an ENERGY STAR certified lamp?

- a. Lumen Maintenance
- b. Color Maintenance
- c. LM-79
- d. All of the above





Question 16 (40 points)

Under Luminaires V2.0, what testing is not needed for a luminaire that ships with an ENERGY STAR certified lamp?

- a. Lumen Maintenance
- b. Color Maintenance
- c. LM-79
- d. All of the above





Question 17 (40 points)

For all Luminaires in V2.0, the Start Time requirement is

- a. The same as Luminaires V1.2
- b. 750 milliseconds
- c. 750 milliseconds, unless recognized as a "connected luminaire"
- d. 1 second





Question 17 (40 points)

For all Luminaires in V2.0, the Start Time requirement is

- a. The same as Luminaires V1.2
- b. 750 milliseconds
- c. 750 milliseconds, unless recognized as a "connected luminaire"
- d. 1 second





Question 18 (40 points)

Which of the following is an exception to the requirement that a luminaire shall not draw power in the off state?

- a. Luminaires with integral sensors or connected functionality may draw up to 0.5 watts in standby mode.
- b. Luminaires with integral sensors and connected functionality may draw up to 1 watt in standby mode
- c. Power supplies connected to multiple luminaires may draw up to 1.5 watts in standby mode.
- d. All of the above





Question 18 (40 points)

Which of the following is an exception to the requirement that a luminaire shall not draw power in the off state?

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- c. Power supplies connected to multiple luminaires may draw up to 1.5 watts in standby mode.
- d. All of the above





Question 19 (40 points)

All luminaires must have replaceable ballasts or drivers except ______.

- a. Luminaires employing self-ballasted lamps
- b. Inseparable SSL luminaires
- c. Retrofit kits
- d. All of the above





Question 19 (40 points)

All luminaires must have replaceable ballasts or drivers except

- a. Luminaires employing self-ballasted lamps
- b. Inseparable SSL luminaires
- c. Retrofit kits
- d. All of the above





Question 20 (40 points)

Which of the following allowable variations requires supplemental testing?

- a. Electrical connections
- b. Heat sink
- c. Light Source
- d. Mounting





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How did you do?

- Winners?
- One last tie-breaker?



