



# Lamps V2.0 Proposal Discussion (1 of 4)

**November 12, 2015**

**1-2:30pm EST**

Taylor Jantz-Sell LC, U.S. Environmental Protection Agency

Dan Rogers LC, IES, LEED AP, ICF International



## Today's Agenda

- Proposal Review
- Discussion

This meeting is being recorded. EPA intends to post recordings of the four scheduled meetings to inform stakeholders unable to attend.



## Welcome

- Introductions
  - In-person
- Questions/comments welcome
  - For everyone's benefit, please state name and organization before commenting
  - Can ask questions via the webinar chat at any time

# Specification Development Process Overview

- Draft 1
  - Draft 1 released February 13, 2015
- Draft 2
  - Released April 10, 2015
- Draft 3
  - Released August 6, 2015
- Final Specification
  - Estimated completion January 2016
- Effective date
  - Estimated January 2017





## Rated Life (proposed)

EPA is proposing a rated life requirement of 15,000 hours for all LED omnidirectional lamps

- This matches the current requirement for decorative LED lamps.
- Based on the FTC reporting requirements, this equates to 13.7 years based on 3-hour/day operation.
- At the same time EPA is proposing to tighten the requirements for passing the life and lumen maintenance test by requiring that all units (versus the current 9 of 10) be operational throughout the duration of life testing.



## Rated Life - Questions

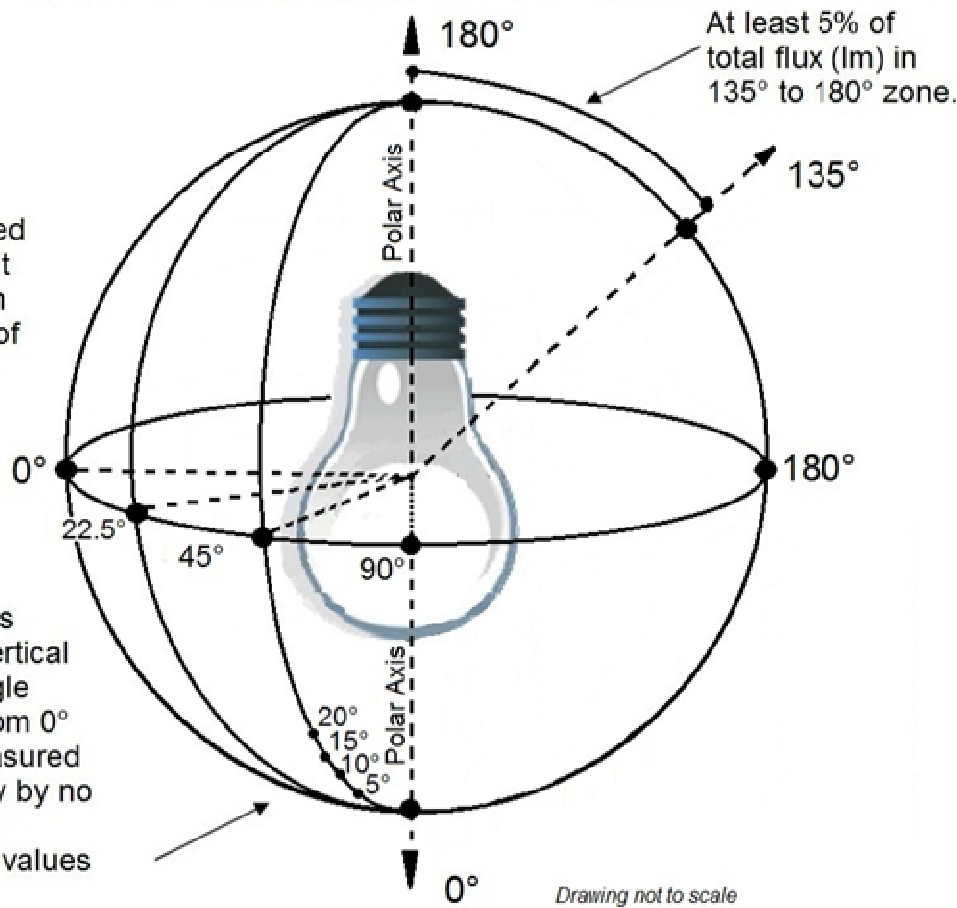
1. EPA has only received suggestions that rated life be reduced for omnidirectional products. Is there any interest in reducing rated lifetime requirement for directional lamps?
2. EPA has received some confidential pricing and performance quality information related to lifetime. Is there any additional information EPA should examine for considerations of lifetime?

# Omnidirectionality (current)

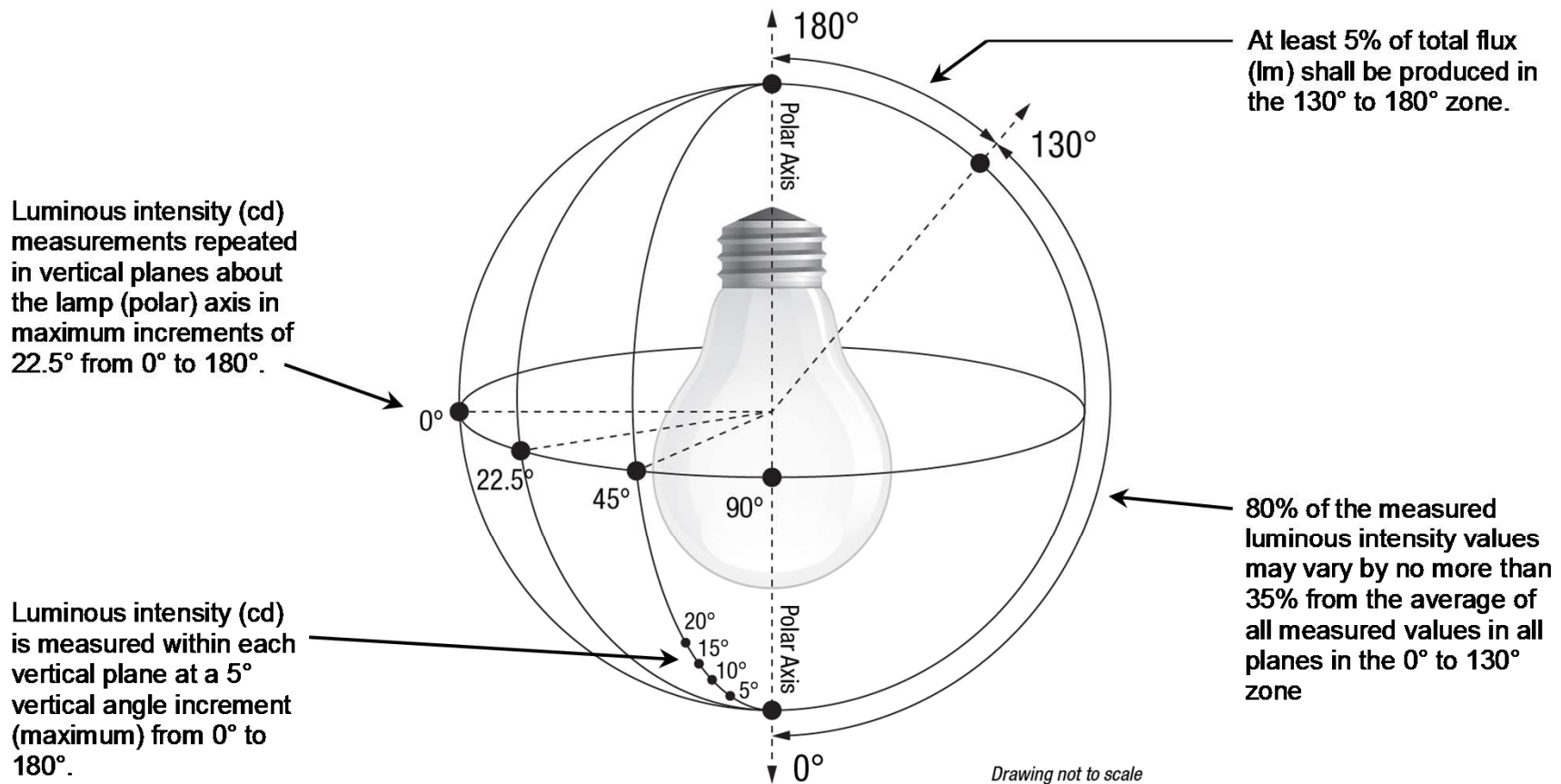
Omnidirectional lamp in base-up position

Measurements repeated in vertical planes about the lamp (polar) axis in maximum increments of 22.5° from 0° to 180°

Luminous intensity (cd) is measured within each vertical plane at a 5° vertical angle increment (maximum) from 0° to 135°. 90% of the measured intensity values may vary by no more than 25% from the average of all measured values in all planes.



# Omnidirectionality (proposed)







## Power Factor

EPA is proposing to lower the minimum power factor requirement for LED lamps to 0.5, consistent with the current requirement for CFLs.

Questions:

1. EPA has received some confidential pricing information related to power factor. Is there any additional pricing information EPA should examine for considerations for the minimum power factor requirement?
2. Is there any research on potential market implications for reducing power factor that EPA should be aware of?



## Efficacy (proposed for 2017)

Lamp Type	ENERGY STAR Requirements	
	Reported values for each lamp model shall meet the applicable requirement in the table below. Additionally eight or more units individually shall meet the requirement.	
	Minimum Lamp Efficacy (initial lm/W)	
	CRI ≥ 90	CRI < 90
<b>Omnidirectional</b>	70	80
<b>Directional</b>	61	70
<b>Decorative</b>	65	



## Efficacy – Question

Lamp Type	Certified Products	Average ENERGY STAR ALL/LED/90+CRI Efficacy today	Pass Rate current products proposed levels (%)	Pass rate assuming modest (10%) efficacy improvements by 2017 (%)
Omni	1620	75/82/70	59	73
Dir	4576	69/70/69	54	74
Dec	698	69/73/66	63	92

**Question:** is there additional information EPA should consider on this issue?



## Discussion Time

- Questions?
- Send comments and questions after the meeting to:

[lighting@energystar.gov](mailto:lighting@energystar.gov)

