

Rationale for Integral LED lamp criteria (Fluid comments in black: PECL comments in red)

1	LED advanced as technically and commercially viable products
Comments:	I am uncomfortable stating that LED have advanced across the board as technically and commercially viable. There are products that work, and there are products that are not ready. I want to make sure that we are not stating that LEDs are ready for mass consumption. That being said, I agree with the General Lamp Requirement stated on the 1-16-09 draft and lamps that meet or exceed that category are ready for the market.
2	Wide range of performance and quality among currently available integral LED lamps
Comments:	This is absolutely true and unfortunately will be a problem in the consumer acceptance of LED products. It is imperative that the Energy Star standards gets finalized and that once adopted they become the standard to which manufacturers adhere to.
3	Energy efficiency sponsors need minimum performance guidelines
Comments:	Yes, absolutely. As above, Energy Star will be our guide, and I believe the guidelines stated in the 1-16-09 draft are a good minimum standard.
4	Setting guidelines at the early stages of market viability provides important market information
Comments:	Yes, I agree with this for all the reasons stated above.
Overall approach	
1	Integral LED lamps claiming to replace standard incandescent or halogen lamps should be similar in terms of light output, intensity distribution, color characteristics, lamp dimensions
Comments:	Perhaps requiring close approximation of physical format to the A19 is counterproductive to step 2 of the overall approach to not inhibit creativity
	I agree with the comment above. I think it is counter-productive to force similar lamp dimensions or shape. One of the benefits of LEDs is the ability to have innovative shapes that may be more aesthetically appealing. However, it is VERY important to be similar (or exact) in light output, intensity, color temperature and CRI to their incandescent counterparts, or else we run the risk of unhappy customers.
2	Equivalency to existing standard lamp types, formats, and distributions should not inhibit innovation and creativity
Comments:	Absolutely not, we want the manufacturers to be as creative and innovative as possible (see comment above)
3	Integral LEDs should provide significant energy savings compared to incandescent and halogen sources they replace
Comments:	Is the intent of requiring higher standards for LEDs in general illumination category so they may compete with CFLs? Seems to me that a design approach may be better. The industry can use CFLs for efficient general illumination but needs an alternative in directional lighting.....however these proposed standards will be lower in this segment when LEDs are better suited for directional. Allowing lower quality product in the arena LEDs fit best in may taint consumer perception.

	If we are looking at replacement of a incandescent or halogen, then for our purposes it is important that LEDs provide significant savings.
Key Issues	
1	Dimming
Comments:	a- no; b- yes; c- perhaps consider shipping a dimmer with the product (expensive) or specifying the compatible dimmer list on the spec sheet and including an asterisk next to the dimmable claim on the box with some verbiage such as 'Dimmable with compatible wall switch'
	I believe that A is possible and preferred as it will be almost impossible to ensure that B or C are achievable . However, I would like the manufacturers to comment on the viability of A.
2	Non-Standard Lamps
Comments:	a- people wont understand; b- compare to CFL as well; c- why require format at all so long as the size is similar and socket is Edison?
	A - yes, we need to move people away from watts as light output and start educating them on lumens and lumen output. That being said, I agree with above that most consumers will not understand. B - use language like "the light output of this product = 800 lumens = equals that of a 60 watt incandecent." We want to move away from the term "bulb"
3	Low-Voltage MR16's
Comments:	I have not commented on this. More understanding of the issue is required.
4	Reliability Testing
Comments:	I like the requirements stated in the Testing Requiremets of the 1-16-09 Draft. However, I would like to see the hour requirement increase from 6,000 hours to at least 10,000 or 12,000 hours