## **LED Vendor Questions**

© 2010 1000Bulbs.com Garland, Texas 75041 | All Rights Reserved

- 1. Is your company registered as a U.S. Department of Energy Solid-State Lighting (SSL) Quality Advocate?<sup>1</sup> If you are, please forward "Lighting Facts" labels for all your LED offerings to pcoppage@1000Bulbs.com.
- 2. Have any of your LED offerings undergone U.S. Department of Energy Commercially Available LED Product Evaluation and Reporting (CALiPER) testing?<sup>2</sup> If so, please forward specific product reports to <a href="mailto:pcoppage@1000Bulbs.com">pcoppage@1000Bulbs.com</a>.
- 3. Has an independent lighting laboratory tested your LED offerings in accordance with LM-79-08 procedures? If so, please forward specific reports to <a href="mailto:pcoppage@1000Bulbs.com">pcoppage@1000Bulbs.com</a>.
- 4. If an independent lighting laboratory has not tested your LED offerings in accordance with LM-79-08 procedures AND you've published literature noting the
  - Correlated Color Temperature (CCT)
  - Color Rendering Index (CRI)
  - Luminous Flux (Lumens)
  - Luminous Intensity Distribution (Candelas)
  - Electrical Power (Watts) and/or
  - Luminous Efficacy (Lumens / Watt)

of your LED offerings, do your figures differ from the figures of the LED packages, arrays, and modules built into your offerings? If the figures differ, how were your figures determined?

- 5. If one or more of your LED offerings produce white light for indoor applications, what is the nominal Correlated Color Temperature (CCT) of your offerings? Was the nominal CCT determined through the FLR chromaticity based system or the flexible CCT system in accordance with ANSI C78.377?
- 6. If one or more of your LED offerings produce white light for indoor applications, what is the Color Rendering Index (CRI) of your offerings?
- 7. Do you manufacture your own LED packages, arrays, and modules, or do you purchase them? If you purchase them, what brand and model number of LED packages, arrays and modules do you purchase?
- 8. How were the life ratings of your LED offerings determined? Do the life ratings of your LED offerings differ from the life ratings of the LED packages, arrays and modules built into your offerings?

<sup>&</sup>lt;sup>1</sup> For information about the U.S. DOE Lighting Facts program, visit: <a href="http://www.lighting-facts.com/">http://www.lighting-facts.com/</a>

<sup>&</sup>lt;sup>2</sup> For information about CALiPER, visit: <a href="http://www1.eere.energy.gov/buildings/ssl/caliper.html">http://www1.eere.energy.gov/buildings/ssl/caliper.html</a>

- 9. Do you test your LED offerings to ensure they last as long as your published life ratings? If you do, please forward specific reports to <a href="mailto:pcoppage@1000Bulbs.com">pcoppage@1000Bulbs.com</a>.
- 10. Were the life ratings / lumen maintenance of the LED packages, arrays and modules built into your LED offerings determined by an independent lighting laboratory in accordance with LM-80-08 procedures? If they were, please obtain and forward specific reports to <a href="mailto:pcoppage@1000Bulbs.com">pcoppage@1000Bulbs.com</a>.
- 11. Do you offer any product warranties for your LED offerings? If you do, please forward specific product warranties to pcoppage@1000Bulbs.com
- 12. Are the LED packages, arrays or modules in your offerings wired in series, in parallel, or in series / parallel?
- 13. Does the current applied to the LED packages, arrays and modules in your offerings exceed the LED manufacturer recommendations?
- 14. If you provide a driver with your offerings, does the driver maintain a constant DC current through all LED packages, arrays and modules?
- 15. If you provide a driver with your offerings, what is the maximum quantity of product offerings that can be connected in series with the driver without experiencing voltage drop in the last unit?
- 16. If your LED offering is dimmable, do you provide or recommend a specific driver?
- 17. If your LED offering is dimmable and you provide the appropriate driver, is dimming accomplished by reducing the forward current or by using pulse width modulation?

If questions arise while considering appropriate responses, please contact:

Paul Coppage, LC, LEED AP
VP Product Development and Training
1000Bulbs.com
2140 Merritt Drive
Garland, TX 75041
972-535-0884
pcoppage@1000Bulbs.com