



Green lighting technologies



Kate Buck.
ENERGY STAR
U.S. Department of Energy

February 8, 2010

Re: Operating Frequency Criteria For Energy Star Integral LED Lamps

Dear Kate,

I am the CEO of Lynk Labs Inc. an Illinois based LED lighting company. Lynk Labs Inc. is the industries leading supplier of AC LED device, light engine and power supply technology. We are a small company, growing fast and funded recently by Epistar Corporation, the largest chip maker in the world based in Taiwan.

I am writing to you in response to the recent last minute change in criteria for operating frequency of integral lamps. I'm suspect several LED manufacturers have contacted you to express their frustration with this short noticed change in operating frequency. Lynk Labs shares this frustration and is interested in challenging this decision. We feel that the decision was made with too short notice within the process and needs to revert back to 120 Hz or less and then be revisited by Energy Star one Energy Star can provide the industry supporting data for the change.

Lynk Labs feels that the change to the 150 Hz operating frequency criteria will actually eliminate LED technology from being able to replace many inefficient lamps which will contradict the global, and DOE Energy Star mission for LED lighting.

Lynk Labs has been researching, designing and developing AC LED technology, patents and products for over 8 years and has more knowledge relating to the physics of flicker than any manufacturer in the LED industry.

Lynk Labs and Epistar AC LED technology operates on various drive methods including direct AC and unfiltered DC to die (chips) at frequencies from 50 Hz to the MHz range based on many factors. Many different drive and design schemes can be tied to the cause or eliminating flicker in LED technology beyond just increasing the input operating frequency. Some of these include LED chip and/or package size, spatial separation of the die and/or packages, phosphor latencies, charge storage in drive circuitry, beam angle crossings and more. Therefore, just increasing the frequency criteria for products that are specifically being designed to be integrated within legacy infrastructures having a legacy operating frequency is not justifiable or fair without supporting data.

On behalf of Lynk Labs, other AC LED product manufacturers and the future of the LED lighting industry, I am proposing that Lynk Labs and Energy Star work together to develop criteria that is fair to the industry and true to the facts of operating LEDs at frequencies below 150 Hz.

I believe that Energy Star and the LED lighting industry would benefit from having Energy Star retract this decision and revert back to a frequency defined as “Mains Frequency” and not any specific frequency for a specified period of time. The reason for stating “Mains Frequency” rather than 120 Hz or less is that Lynk Labs can demonstrate AC LED technology and product, being sold to manufacturers now with no visual flicker at 60 Hz input without rectification.

This temporary re-evaluation would allow Energy Star to ensure that the criteria being defined is fair and supportive with actual data from demonstrable technology. If this is something you feel would be of interest to Energy Star, I would like to set a time to talk with you by phone as soon as possible so that we may explore options in developing a plan to collaborate on this effort on behalf of cost effective energy efficient LED lighting.

Sincerely,

Mike Miskin
CEO
Lynk Labs, Inc.